BUILDING CODE:

2012 INTERNATIONAL BUILDING CODE, (IBC) WITH APPLICABLE CITY AMENDMENTS.

GRAVITY LOADS:

ROOF LIVE LOAD = 20 PSF (REDUCIBLE). SLOPED ROOF DEAD LOAD = 30 PSF. FLAT ROOF DEAD LOAD = 20 PSF.

LATERAL LOADS:

ULTIMATE DESIGN WIND SPEED = 120 MPH (3s GUST). NOMINAL DESIGN WIND SPEED = 95 MPH (3s GUST). RISK CATEGORY: IN WIND EXPOSURE: (INTERNAL PRESSURE COEFFICIENT (ENCLOSED BUILDINGS): +0.18 / -0.18 COMPONENTS & CLADDING WIND PRESSURE: 42 PSF (LRFD) OR 25 PSF (ASD) - END ZONE 35 PSF (LRFD) OR 21 PSF (ASD) — TYPICAL 70 PSF (LRFD) OR 42 PSF (ASD) - PARAPETS

RISK CATEGORY IV SEISMIC IMPORTANCE FACTOR: $I_F = 1.50$

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS: $(S_s = 0.155, S_1 = 0.053)$ DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS: $(S_{DS} = 0.124, S_{D1} = 0.060)$ SEISMIC DESIGN CATEGORY: A (DESIGNED AS SDC B) BASIC SEISMIC FORCE RESISTING SYSTEM: A.2 AND A.8 ASCE 7-10 TABLE 12.2-1 SEISMIC RESPONSE COEFFICIENT, Cs = 0.053W (LRFD), 0.038W (ASD) RESPONSE MODIFICATION FACTOR R = 3.5ANALYSIS PROCEDURE USED: EQUIVALENT FORCE METHOD

FOUNDATIONS:

REFER TO SOILS REPORT AND DETAIL 1 FOR ADDITIONAL INFORMATION PRIOR TO COMMENCEMENT OF EARTHWORK. BEFORE ANY CONCRETE IS PLACED, EXCAVATION SHALL BE CHECKED AND APPROVED BY A QUALIFIED SOILS ENGINEER.

DESIGN IS BASED ON SOIL REPORT NO. 190095SA BY SPEEDIE AND ASSOCIATES DATED FEBRUARY 13. 2019. SPREAD FOOTINGS SHALL BEAR ON ENGINEERED FILL 2'-0" MINIMUM BELOW ADJACENT FINISHED GRADE, PAD GRADE OR EXISTING GRADE AS STATED IN SOILS REPORT. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF

DESIGN SOIL BEARING VALUE: 2,500 PSF.

SIMPLY STRUCTURAL INC. CAN NOT BE HELD RESPONSIBLE FOR FUTURE PROBLEMS ARISING FROM

STRUCTURAL CONCRETE:

ALL CAST-IN-PLACE CONCRETE CONSTRUCTION HAS BEEN DESIGNED ACCORDING TO ACI 318-14 AND SHALL CONFORM TO THE FOLLOWING:

CEMENT SHALL CONFORM TO ASTM C-150 TYPE I OR II. MIXING SHALL CONFORM TO ASTM C-94. AGGREGATES (NORMAL WEIGHT CONCRETE) SHALL CONFORM TO ASTM C-33.

THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE (F'c) AT 28 DAYS SHALL BE: ENLINDATIONS (DESIGN DASED ON 3 500 DSI)

FOUNDATIONS (DESIGN BASED ON 2,500 PSI)	3,000	PSI		
SLABS ON GRADE AND STEM WALLS	4,000	PSI		
	(W/C	RATIO :	= 0.49	MAX)
	-SEE	PLAN		·
ICF WALLS	3,000	PSI		

- 1. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED AND THOROUGHLY CONSOLIDATED DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED FIXTURES AND INTO CORNERS OF THE FORMS UNLESS NOTED OTHERWISE. 2. SLUMP RANGE SHALL BE 4-6 INCHES PRIOR TO ADMIXTURES. ADMIXTURES MAY NOT BE USED
- WITHOUT THE SPECIFIC PRIOR WRITTEN APPROVAL FROM THE ARCHITECT/STRUCTURAL ENGINEER. ADMIXTURES USING ANY FORM OF CHLORIDES SHALL NOT BE USED. CAST CLOSURE POUR AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED.
- 4. THE EMBEDMENT OF ANY CONDUITS, PIPES, SLEEVES, ETC. SHALL NOT BE PERMITTED WITHIN ANY CONCRETE STRUCTURAL ELEMENT (IE: COLUMNS, BEAMS, ELEVATED SLABS, ETC.) WITHOUT WRITTEN APPROVAL FROM SIMPLY STRUCTURAL INC. UNLESS NOTED OTHERWISE ON THE
- 5. FLY ASH IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS, SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR COAL FLY ASH AND RAW OR CALCINED NATURAL POZZOLAN FOR USE IN CONCRETE" (ASTM C 618). FLY ASH SHALL NOT BE USED IN ARCHITECTURALLY EXPOSED CONCRETE, ON SLABS WITH A BURNISHED OR ACID FINISH, OR WHERE IT COULD NEGATIVELY EFFECT ANY MATERIAL IN CONTACT WITH IT.
- 6. TESTING OF CONCRETE SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN: ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150-YD3 OF CONCRETE NOR LESS THAN ONCE FOR EACH 5,000-FT2 OF SURFACE AREA FOR SLABS OR WALLS. SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH "STANDARD PRACTICE FOR MAKING AND CURING CONCRETE TEST SPECIMENS IN THE FIELD" (ASTM C 31); AND TESTED IN ACCORDANCE WITH "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS" (ASTM C 39).
- 7. TEST DATA FOR CONCRÈTE SUBMITTALS TEST DATA SHALL BE SUBMITTED FOR REVIEW PER ACI 318 CHAPTER 5. REFERENCE TABLE R5.3 FOR SPECIFIC REQUIREMENTS.

CONCRETE SLABS ON GRADE:

1. CONCRETE SHALL BE BATCHED, MIXED, TRANSPORTED, PLACED, CONSOLIDATED AND FINISHED PER ACI 302.1R-04 FOR THE APPROPRIATE FLOOR CLASS TYPE PER TABLE 2.1. SEE TABLE 6.1 (ACI 302.1R-04) FOR RECOMMENDED STRENGTH AND MAXIMUM SLUMP AT POINT OF PLACEMENT FOR CONCRETE FLOORS. MIX DESIGN SHALL PROVIDE THE LARGEST PRACTICAL—SIZE AGGREGATE THAT DOES NOT EXCEED 3/4 OF THE MIN. CLEAR SPACING OF REINFORCING BARS OR 1/3 OF THE

2. CONCRETE SLABS ON GRADE REQUIRE MECHANICAL VIBRATION ONLY AT TRENCHES, FLOOR

- DUCTS. TURNDOWNS ETC. 3. ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY SAW CUT CONTROL JOINTS, COLD JOINTS WITH DIAMOND PLATES PER ACI 302.1R-04 TABLE 3.2, OR KEYED JOINTS. (KEYED JOINTS ARE NOT PERMITTED IN WAREHOUSES, WHERE FORKLIFTS WILL BE USED OR WHERE STORAGE RACKING WILL BE INSTALLED). JOINTS MAY NOT BE MODIFIED UNLESS APPROVED IN WRITING BY SIMPLY STRUCTURAL INC. AND THE ARCHITECT, AND MUST BE LOCATED AS SHOWN ON THE FOUNDATION PLAN. FOR UNREINFORCED PLAIN CONCRETE SLABS, MAXIMUM SPACING BETWEEN JOINTS SHALL BE 36 TIMES THE SLAB THICKNESS OR 15'-0" ON CENTER MAX. MAXIMUM RATIO OF LONG SIDE TO SHORT SIDE SHALL BE 1 1/2 TO 1. COLD JOINTS OR KEYED CONTROL JOINTS NEED ONLY OCCUR
- AT EXPOSED EDGES DURING POURING; ALL OTHER JOINTS MAY BE SAW CUT. 4. ALL JOINTS SHALL BE FILLED AND OR SEALED AS SPECIFIED BY THE ARCHITECT. AT A MINIMUM, JOINTS SUBJECTED TO VEHICLES WITH HARD WHEELS SUCH AS FORKLIFTS SHALL BE FILLED WITH A SEMIRIGID EPOXY RESIN OR POLYUREAS CONSISTING OF 100%% SOLIDS THAT HAS A MINIMUM SHORE HARDNESS OF 80 WHEN MEASURED IN ACCORDANCE WITH ASTM D 2240. ACI 302.1R-04 ADVISES TO DEFER JOINT FILLING AND SEALING AS LONG AS POSSIBLE (60-90 DAYS MN.) TO MINIMIZED THE EFFECTS OF SHRINKAGE-RELATED JOINT OPENING ON THE FILLER OR SEALANT. SEMIRIGID AND POLYUREA FILLERS SHOULD BE INSTALLED FULL-DEPTH IN SUITABLY CLEAN
- 5. VAPOR BARRIERS SHALL BE USED WHERE INDICATED ON FOUNDATION PLAN AND WHERE REQUIRED BY ARCHITECTURAL SPECIFICATIONS/DRAWINGS. VAPOR BARRIER MATERIAL SHALL BE IN COMPLIANCE WITH ASTM E 1745 AND THE THICKNESS SHALL BE 15 MILS OR GREATER. THE LAPS OR SEAMS SHALL BE OVERLAPPED 6" MINIMUM OR AS INSTRUCTED BY THE MANUFACTURER. JOINTS AND PENETRATIONS SHOULD BE SEALED WITH THE MANUFACTURER'S RECOMMENDED USING ADHESIVE, PRESSURE-SENSITIVE TAPE, OR BOTH. THE VAPOR BARRIER SHALL BE PLACED OVER THE A.B.C. AS SHOWN ON THE FOUNDATION PLAN. THE A.B.C. FILL SHALL BE PROTECTED FROM TAKING ON ADDITIONAL WATER PRIOR TO INSTALLATION OF THE VAPOR BARRIER.
- 6. REINFORCING SPLICE LENGTHS IN CONCRETE U.N.O. #4 ----- 29"

CONSTRUCTION.

7. ALL EXPOSED CONCRETE SLAB-ON-GRADE SHALL BE WET CURED. 8. WHERE INDICATED ON PLAN, CONCRETE SLABS-ON-GRADE SHALL INCLUDE FIBER REINFORCEMENT IN THE CONCRETE MIX. THE FIBER REINFORCEMENT SHALL BE SYNTHETIC MACROFIBERS WHICH SHALL COMPLY WITH ASTM C 1116 TYPE 3, 1.5" TO 2" IN LENGTH AND ASPECT RATIO OF 50 (MIN) AND 90 (MAX). USE A FIBER DOSAGE TO PROVIDE A MINIMUM POST-CRACK RESIDUAL STRENGTH (Fe3) OF 120 PSI WHEN TESTED ACCORDING TO ASTM C1609. ACCEPTABLE PRODUCT: EUCLID CHEMICAL, TUF-STRAND SF OR MAXTEN AT 5.0 LBS/YD3 DOSAGE. CONTACT FIBER MANUFACTURER FOR MIX DESIGN AND PUMPING, PLACING AND FINISHING PRACTICES PRIOR TO

ICF (INSULATED CONCRETE FORM) WALLS:

- 1. ICF WALL UNITS SHALL CONFORM TO ACI 332, MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED. CONCRETE SLUMP SHALL BE 4" TO 6" PRIOR TO PLASTICIZER AND 8" TO 9" AFTER ADDITION OF PLASTICIZER. AGGREGATE SIZE TO BE 3/8" MAXIMUM.
- 2. MAXIMUM CONCRETE LIFT SHALL BE 6'-0" WHEN APPROVED BY THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL. CONCRETE LIFTS MAY BE GREATER THAN 6'-0" IF IT CAN BE DEMONSTRATED BY CONTRACTOR THAT THE FORM CAN BE PROPERLY FILLED. FILL FORMS SOLIDLY WITH CONCRETE IN LIFTS AND STOP POURS 1 1/2" BELOW THE TOP OF A COURSE TO FORM A KEY AT POUR
- 3. SEE DETAILS AND NOTES ON DRAWINGS FOR SIZE AND SPACING OF REINFORCING BARS, LAP SPLICES OF REINFORCING IN ICF WALLS, UNLESS NOTED OTHERWISE, SHALL BE MINIMUM 40 BAR DIAMETERS FOR GRADE 40 BARS AND 48 BAR DIAMETERS FOR GRADE 60 BARS WHERE TWO VERTICAL BARS ARE LOCATED IN ONE CELL, LAP SPLICES SHALL BE 52 BAR DIAMETERS FOR OVER 40 BARS AND 63 BAR DIAMETERS FOR GRADE 60 BARS. REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT WITH WIRE POSITIONERS AT EACH GROUT LIFT AND AT INTERVALS NOT EXCEEDING 8'-0" VERTICALLY. PROVIDE VERTICAL DOWELS FROM FOOTINGS CONTINUOUS THROUGH STEM WALLS INTO ICF WALL ABOVE. DOWELS SHALL MATCH SIZE AND SPACING OF ALL VERTICAL REINFORCING. EXTEND ALL HORIZONTAL BOND BEAM REINFORCING IN ICF WALLS CONTINUOUS AROUND CORNERS AND INTERSECTIONS OR PROVIDE BENT CORNER BARS TO MATCH AND LAP HORIZONTAL BOND BEAM REINFORCING AT CORNERS AND INTERSECTIONS. ALL REINFORCING IN ICF WALLS SHALL BE ACCURATELY LOCATED PRIOR TO CONCRETE PLACEMENT AND THE POSITION MAINTAINED DURING CONCRETE PLACEMENT.
- 4. ICF WALL SYSTEM HAVE BEEN DESIGNED USING THE NUDURA WALL SYSTEM (WWW.NUDURA.COM). IF CONTRACTOR PROPOSES TO USE ANOTHER WALL SYSTEM, IT SHALL BE SUBMITTED DURING THE BIDDING PROCESS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

STRUCTURAL MASONRY:

ALL MASONRY CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF IBC SECTIONS 2104.1 THROUGH 2104.5 AND LATEST EDITION OF ACI 530. ASCE6/TMS 602. ALL MASONRY UNITS SHALL BE LAID IN RUNNING BOND, ALL CELLS AND SPACES CONTAINING REINFORCING AND ALL MASONRY BELOW FINISHED GRADE SHALL BE FILLED WITH GROUT. GROUT SHALL BE VIBRATED BY MECHANICAL CONSOLIDATION IMMEDIATELY AFTER POURING AND AGAIN 5 TO 10 MINUTES LATER. CLEANOUTS REQUIRED IF GROUT LIFT EXCEEDS 5'-0" IN HEIGHT. WHERE REQUIRED, CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE AT EVERY VERTICAL BAR BUT SHALL NOT BE SPACED MORE THAN 32" ON CENTER FOR SOLIDLY GROUTED MASONRY, BETWEEN GROUT POURS A HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING ALL WYTHS AT THE SAME ELEVATION AND STOPPING GROUT POURS 1 1/2" MINIMUM BELOW A MORTAR JOINT (1/2" MINIMUM AT TOP OF WALL). PLACE VERTICAL CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUNS OF WALL EXCEEDS 24'-0" UNLESS NOTED OTHERWISE ON THE PLANS. CONTROL JOINTS SHALL NOT OCCUR WITHIN 24" OF: CONCENTRATED LOADS, WALL CORNERS, WALL INTERSECTIONS, OPENING JAMBS, WALL ENDS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. REINFORCING SPLICE LENGTHS IN MASONRY:

1 #4 IN CELL 1 #5 IN CELL 1 #6 IN CELL	17" 31" 58"
2 #4 IN CELL 2 #5 IN CELL 2 #6 IN CELL	 21" 49" 102"

MASONRY PROPERTIES:

MASONRY WALL ASSEMBLY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF I'M = 1,500 PSI U.N.O. MASONRY SHALL BE LAID UP IN A RUNNING BOND U.N.O. HOLLOW CONCRETE MASONRY UNITS SHALL BE ASTM C90, MEDIUM WEIGHT GRADE N, TYPE 1 WITH MINIMUM F'm = 1,900 PSI. MORTAR SHALL BE TYPE S AND SHALL COMPLY WITH ASTM C270 WITH A MINIMUM I'm = 1,800 PSI. GROUT SHALL HAVE A MINIMUM f'c = 2,000 PSI AND SHALL COMPLY WITH ASTM C476. VERTICAL REINFORCING:

REINFORCING SHALL CENTERED IN THE CELLS UNLESS NOTED OTHERWISE AND BE CONTINUOUS FULL HEIGHT OF GROUT POUR PLUS REQUIRED LAP LENGTH. PROVIDE 1 #5 CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT SPACING PER DETAIL 21 UNLESS NOTED OTHERWISE. REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS OR 10 FEET.

HORIZONTAL REINFORCING:

DO NOT SPLICE REINFORCING WITHIN 8'-0" OF CONTROL JOINTS. PROVIDE 2 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ELEVATED FRAMING ASSEMBLIES. PROVIDE 1 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPETS. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. PROVIDE STANDARD WEIGHT, 9 GAGE WIRE, LADDER TYPE JOINT REINFORCEMENT PER ASTM A951 AT 16" O.C. IN HORIZONTAL JOINTS (LAP 8" MINIMUM).

REINFORCING STEEL:

LATEST ACI 318-14 CODE AND DETAILING MANUAL APPLY. ALL REINFORCING SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES. SUPPORT OF FOUNDATION REINFORCING MUST PROVIDE ISOLATION FROM MOISTURE/CORROSION BY USE OF PLASTIC OR CONCRETE CHAIR. DUCT-TAPE COVERED REINFORCING IS NOT AN ACCEPTABLE CHAIR. ALL DIMENSIONS REFERENCED IN DRAWINGS AS "CLEAR" SHALL BE FROM FACE OF STRUCTURE TO EDGE OF REINFORCING, AND SHALL NOT BE LESS THAN STATED, NOR GREATER THAN "CLEAR" DIMENSION PLUS 3/8". ALL OTHERS SHALL BE PLUS OR MINUS 1/4" TYPICAL UNLESS NOTED OTHERWISE. ALL REINFORCING SHALL BE SECURELY TIED IN PLACE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT. DEFORMED REINFORCING SPECIFICATIONS AS FOLLOWS:

> ASTM A615, GRADE 60 (Fy = 60 KSI) FOR #4 BARS AND LARGER ASTM A615, GRADE 40 (Fy = 40 KSI) FOR #3 BARS

CLEAR CONCRETE COVERAGE'S OF ALL STEEL SHALL BE:

OUT ON PLANS OR IN SCHEDULES.

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ----- 3"

PREFABRICATED WOOD "I" JOISTS:

(DEFERRED SUBMITTAL)

1. JOIST SIZES ARE INDICATED ON PLANS AND SCHEDULES. EXAMPLES OF CALLOUTS IN JOIST

SCHEDULE ARE AS FOLLOWS: 16" INDICATES JOIST DEPTH 16" WOOD "I" JOIST -80/40 80 INDICATES TOTAL LOAD (PLF) 40 INDICATES LIVE LOAD (PLF) NOTE: THE LOADS ABOVE DO NOT INCLUDE SPECIAL OR ADDITIONAL LOADS CALLED

- THE JOIST MANUFACTURER SHALL BE RESPONSIBLE FOR THE COMPLETE DESIGN, FABRICATION AND ERECTION PROCEDURES FOR ALL JOISTS, JOIST HANGERS, WOOD OR METAL BRIDGING, BLOCKING PANELS, WEB STIFFENERS, INCIDENTAL FRAMING, FRAMING FOR OPENINGS NOT SHOWN ON DRAWINGS, TEMPORARY AND PERMANENT BRACING AND BRIDGING, CONNECTIONS, HOLDOWN ANCHORS AND ALL OTHER ITEMS REQUIRED FOR A COMPLETE AND SAFE INSTALLATION OF THE JOIST SYSTEM. JOIST SIZES ARE INDICATED ON THE DRAWINGS.
- JOISTS SHALL HAVE CURRENT ICC APPROVAL. DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE ICC REPORT. LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/360 AT SIMPLE SPAN MEMBERS AND 2x SPAN/360 AT CANTILEVERED MEMBERS. ROOF JOIST DURATION OF LOAD FACTOR SHALL BE 1.25 FOR COMBINED DEAD AND LIVE LOADS AND SHALL BE 1.33 FOR ANY LOAD COMBINATION INCLUDING WIND OR SEISMIC. ALL JOISTS SHALL BE CAMBERED FOR 1.5 TIMES THE DESIGN DEAD LOAD DEFLECTION.
- 4. CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS SEALED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ARIZONA FOR REVIEW PRIOR TO MANUFACTURE. CALCULATIONS AND SHOP DRAWINGS SHALL INCLUDE BUT NOT LIMITED TO DESIGN LOADS. ALLOWABLE STRESSES, STRESS DIAGRAMS, SPECIAL BEARING OR CONNECTION DETAILS AND ERECTION DRAWINGS.
- 5. ADDITIONAL JOISTS WILL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT.
- 6. ALL CONNECTORS SPECIFIED BY THE MANUFACTURER SHALL HAVE CURRENT ICC APPROVAL. MANUFACTURER SHALL SUPPLY MULTIPLE, SKEWED AND/OR SLOPED JOIST HANGERS AS NECESSARY.

STRUCTURAL WOOD:

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE NDS ALONG WITH GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL SAWN LUMBER SHALL BE STANDARD DRESSED (S4S) AND KILN DRIED WITH MOISTURE CONTENT NOT TO EXCEED 19% AND SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL MEET OR EXCEED THE FOLLOWING WOOD TYPES AND PROPERTIES:

	WOOD TYPE
2X AND 4X JOISTS/BEAMS	D.F. #2 D.F. #1
LEDGERS AND TOP PLATES STUDS	D.F. #2 D.F. #2
4X POSTS	D.F. #2 D.F. #1

GENERAL:

WOOD FRAMING MEMBER SHALL NOT BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. ALL NAILING NOT NOTED SHALL BE PER TYPICAL DETAIL. ALL BOLTING SHALL BE PER STEEL SECTION. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT I.C.C. APPROVAL. WHERE "TYPE" OF CONNECTOR IS INDICATED ON THE DRAWINGS. THE CONNECTOR AND ATTACHMENT SHALL BE PER THE MAXIMUM MODEL NUMBER BASED ON THE SIZE OF THE MEMBERS CONNECTED.

IN STUD WALLS, UNLESS NOTED OTHERWISE, INSTALL DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS AND AT ISOLATED BEARING POINTS OF FRAMING MEMBERS ABOVE, EVERY OTHER STUD OF WOOD FRAME REARING WALL SHALL HAVE A SIMPSON H3 ANCHOR TOP AND BOTTOM - EXCEPT AT THOSE WALLS WHERE PLYWOOD SHEATHING IS NAILED DIRECTLY TO THE TOP AND BOTTOM PLATES. PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS. SILL PLATES AT ALL EXTERIOR WALLS SHALL BE EITHER PRESERVATIVELY TREATED WOOD OR FOUNDATION - GRADE

PROVIDE 2" SOLID BLOCKING AT SUPPORTS OF ALL JOISTS. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS. DO NOT NOTCH, DRILL OR SPLICE JOISTS, BEAMS OR STUDS WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

ALL WOOD CONNECTORS SHALL BE BY SIMPSON STRONG-TIE OR EQUAL BY OTHER MANUFACTURER WITH ICC OR IAPMO APPROVAL AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER

DO NOT NOTCH, DRILL OR SPLICE JOISTS, BEAMS OR STUDS WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

GLUE-LAMINATED BEAMS(GLULAM):

ALL GLU-LAM BEAMS SHALL BE FABRICATED USING WATERPROOF-GLUE. FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS. CAMBER BEAMS AS SHOWN ON DRAWINGS. BEAM WIDTHS INDICATED MAT BE ENLARGED AT HE CONTRACTORS DISCRETION (3 1/8" MAY BE 3 1/2", 5 1/8" MAY BE 5 1/2", 6 /4" MAY BE 7 1/4" AND 8 3/4" MAY BE 9 1/4" WIDTH). BEAMS TO BEAR BOTH GRADE STAMP AND AITC STAMP AND CERTIFICATE. STANDARD CAMBER R = 2500' U.N.O.

SIMPLE SPAN BEAMS ---- 24F-V4 CANTILEVERING BEAMS ---- 24F-V8

NAILING:

ALL NAILING INDICATED THROUGHOUT THE DRAWINGS SHALL HAVE THE FOLLOWING MINIMUM DIAMETERS/LENGTHS ALONG WITH TYPICAL USE:

STRAPS AND PLATES TO LUMBER	- 8d	(2	1/2"x0.131"	DIA	U.N.O.)
PLYWOOD TO LUMBER AND STRAPS TO LEDGER					
LUMBER TO LUMBER	–16d	(3	1/4"x0.131'	DIA	U.N.O.

ENGINEERED LUMBER:

ENGINEERED LUMBER SHALL COMPLY WITH ICC REPORT NO. ESR-1387 WITH THE FOLLOWING WOOD TYPES AND PROPERTIES:

2X STUDS1.3	E TIMBERSTRAND LSL
2X RIM JOISTS1.5	E TIMBERSTRAND LSL OR 1.55E TIMBERSTRAND LSL
3 1/2", 5 1/4", 7" BEAMS 2.0	DE PARALLAM PSL
3 1/2", 5 1/4", 7" COLUMNS 1.8	E PARALLAM PSL

PLYWOOD:

ALL PLYWOOD SHALL BE AMERICAN PLYWOOD ASSOCIATION "CDX" RATED SHEATHING OR BETTER AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD. ALL PLYWOOD SHALL BE LAID WITH STAGGERED JOINTS AND BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATIO AND SHALL BE ATTACHED WITH NAILS PER NAILING SECTION AS FOLLOWS UNLESS NOTED OTHERWISE:

	THICKNESS	SPAN/INDEX RATIO	EDGE ATTACHMENT	INTERMEDIATE ATTACHMENT
ROOF TYPICAL	1/2"	32/16	10d AT 6" O.C.	10d AT 12" O.C.
SHEAR WALL	1/2"	32/16	10d AT 6" O.C. MAX. (SEE SHEAR WALL SCHEDULE)	10d AT 12" O.C.

AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFING CONTRACTOR, WHERE ROOF IS TO BE GUARANTEED, IT MAY NOT BE USED WITHOUT PRIOR APPROVAL FROM ROOF SYSTEM MANUFACTURER. RATED SHEATHING SHALL COMPLY WITH I.C.C. REPORT NO. ESR-2586, EXPOSURE 1 AND SHALL HAVE A SPAN RATING AND SHEAR VALUES EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN 1/32") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PREFABRICATED WOOD TRUSSES:

PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REFERENCED BUILDING CODE, AND ALL OTHER APPLICABLE REPORTS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION FOR REVIEW AND APPROVAL BY SIMPLY STRUCTURAL INC. PRIOR TO FABRICATION. IN ADDITION TO LOADS SPECIFIED IN THE G.S.N., PLANS AND DETAILS, DESIGN SHALL INCLUDE, BUT NOT

- 1. DEFLECTION/CAMBER: FLOOR LIVE LOAD MAXIMUM = L/480. ROOFS LIVE LOAD MAXIMUM = L/360. FOR ROOF SLOPES LESS THAN 1/4" PER FOOT, MEMBERS MUST BE DESIGNED FOR PONDING.
- 2. TOP CHORD MEMBER WOOD SPECIES SHALL BE DOUGLAS FIR-LARCH, OR SOUTHERN PINE. ALL OTHER SPECIES MUST BE SUBMITTED TO SIMPLY STRUCTURAL INC. FOR REVIEW AND APPROVAL PRIOR TO BIDDING. THE ABSOLUTE MINIMUM SPECIFIC GRAVITY THAT WILL BE CONSIDERED IS 0.42.
- 3. CONNECTIONS AND BEARING MATERIAL TO BE SHOP CONNECTED, DESIGNED AND FURNISHED BY FABRICATOR.
- 4. ADDITIONAL FRAMING MEMBERS SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMEN1

PREFABRICATED WOOD TRUSSES SHALL BE CAMBERED FOR 1.5 TIMES THE DEAD LOAD DEFLECTION. MULTIPLE FRAMING MULTIPLE FRAMING MEMBERS SHALL BE FASTENED TOGETHER TO ALLOW TRANSFER OF SHEAR AND TENSION FORCES (MINIMUM 200 PLF) AT PLYWOOD SHEATHING JOINTS AND TO PREVENT CROSS GRAIN BENDING OF TOP CHORDS. ATTACHMENT SHALL BE A CONTINUOUS 20 GAGE METAL PLATE OR OTHER APPROVED MEANS, METHOD OF ATTACHMENT SHALL BE INDICATED ON SHOP DRAWINGS FOR REVIEW.

PREFABRICATED WOOD TRUSSES SHALL BE MANUFACTURED BY SHOPS WHICH HAVE CURRENT I.C.C. CERTIFICATION AS AN APPROVED FABRICATOR PER THE REFERENCED BUILDING CODE. TRUSS CONSTRUCTION DOCUMENTS SHALL BE PREPARED IN ACCORDANCE WITH 2303.4.1.

STRUCTURAL STEEL:

THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND STRUCTURES SHALL BE IN ACCORDANCE WITH AISC 360. FOR ALL STEEL WHERE Fy > 36 KSI, THE ASTM OR OTHER SPECIFICATION DESIGNATION SHALL BE INCLUDED NEAR THE ERECTION MARK ON EACH SHIPPING ASSEMBLY OR IMPORTANT CONSTRUCTION COMPONENT OVER ANY SHOP COAT OF PAINT PRIOR TO SHIPMENT FROM THE FABRICATOR'S PLANT. USE THE FOLLOWING MINIMUM PROPERTIES UNLESS NOTED

- RECTANGULAR AND SQUARE HSS SHALL BE ASTM A500 GRADE B (Fy = 46 KSI).
- WIDE FLANGE STEEL SHALL BE ASTM A992 (Fy = 50 KSI). • STRUCTURAL PIPE SHALL BE ASTM A53, TYPE E OR S, GRADE B (Fy = 35 KSI)
- MISCELLANEOUS STEEL AND OTHER STEEL SHAPES SHALL BE ASTM A36 (Fy = 36 KSI). BOLTS SHALL BE F1554 GRADE 36 OR ASTM A307.
- CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. ALL REFERENCE TO HEADED STUDS SHALL BE "TRW/NELSON" HIGH STRENGTH HEADED STUDS OR

HIGH STRENGTH BOLTS SHALL BE ASTM A325N TC AND SHALL BE INSTALLED AS BEARING TYPE

APPROVED EQUAL. AT CONTRACTOR'S OPTION HEADED STUDS PER ABOVE MAY BE SUBSTITUTED FOR CONVENTIONAL ANCHORS AND MACHINE BOLTS (REVERSE SUBSTITUTION NOT ALLOWABLE). ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS. AT SHORT SLOTTED HOLES USE SNUG TIGHT INSTALLATION UNLESS NOTED OTHERWISE. WELDING:

ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES ISSUED BY AN ACCEPTED TESTING AGENCY AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS; THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT THEIR DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. UNLESS NOTED OTHERWISE.

ALL WELDS PER THE REFERENCED OR LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) STANDARDS:

AWS D1.1-00 STRUCTURAL WELDING CODE - STEEL STRUCTURAL WELDING CODE - SHEET STEEL AWS D1.3-98 STRUCTURAL WELDING CODE - REINFORCING STEEL AWS D1.4-98 RECOMMENDED PRACTICES FOR STUD WELDING

ALL WELDING DONE BY E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE E90 SERIES.

STEEL ROOF DECK:

DECK SHALL BE 3" DEEP, 24" WIDE, 18 GAGE PAINTED STEEL (GALVANIZED WHERE INDICATED), WITH MINIMUM YIELD STRESS OF 33 KSI. WITH MINIMUM +S = 0.652 IN3 AND I = 1.267 IN4 PER FOOT OF WIDTH. DECK SHALL BE ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AS 3 SPAN MINIMUM AND SHALL BE ATTACHED FOR A MINIMUM DIAPHRAGM SHEAR CAPACITY OF 1187 PLF PER IAPMO ER-2017 USING THE FOLLOWING MINIMUM ATTACHMENTS:

CONNECT DECK TO SUPPORTING FRAMING WITH (4) 1/2" DIA PUDDLE WELDS PER SHEET AT ALL SUPPORT MEMBERS AND AT 6" O.C. AT ALL PARALLEL MEMBERS. SIDE SEAM ATTACHMENT SHALL BE VSC2 CONNECTIONS AT 18" O.C.

POST INSTALLED ANCHORS:

THESE ANCHORS MAY ONLY BE USED WHERE SPECIFIC ANCHORS ARE NOT DENOTED ON PLANS,

SPECIAL STRUCTURAL INSPECTION IS REQUIRED DURING PLACEMENT OF ALL ANCHORS UNLESS SPECIFICALLY NOTED OTHERWISE.

USE OF OTHER ANCHOR PRODUCTS MUST BE APPROVED BY THE ENGINEER OF RECORD.

SYSTEM	MFR	CONCRETE	MASONRY
	DEWALT/POWERS	PURE 110 + (ESR 3298) AC 200 + (ESR 4027)	AC100+GOLD (ESR 3200)
ANS HO	HILTI	HY200 (ESR 3187) RE 100-V3 (ESR 3829)	HY70 (ESR 2682)
	SIMPSON	SET-XP (ESR 2508)	SET-XP (IAPMO ER-265)
	DEWALT/POWERS	SCREW-BOLT + (ESR 3889)	WEDGE BOLTS + (ESR 1678)
Mayor S	HILTI	KWIK-HUS-EZ (ESR 3027)	KWIK-HUS-EZ (ESR 3056)
	SIMPSON	TITEN HD (ESR 2713)	TITEN HD (ESR 1056)
	DEWALT/POWERS	POWER-STUD + SD2 (ESR 2502)	N/A
ŠCM	HILTI	KWIK BOLT TZ (ESR 1917)	N/A
	SIMPSON	STRONG BOLT 2 (ESR 3037)	N/A

STRUCTURAL COLD-FORMED STEEL:

STRUCTURAL AND NON-STRUCTURAL FRAMING MEMBERS UTILIZED IN STEEL CONSTRUCTION SHALL BE COLD-FORMED TO SHAPE FROM SHEET STEEL COMPLYING WITH THE REQUIREMENTS OF ASTM A1003 / A1003M. FRAMING MEMBERS USED IN STEEL CONSTRUCTION SHALL BE IDENTIFIED WITH A LEGIBLE STICKER, STAMP, STENCIL, OR EMBOSSMENT, SPACED A MAXIMUM OF 48" O.C. PER ASTM C645 OR ASTM C955. ALL MEMBERS AND CONNECTIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE IN COMPLIANCE WITH THE "NORTH AMERICAN SPECIFICATIONS (NAS-01) FOR THE DESIGN OF COLD FORMED

MINIMUM DESIGN BASE METAL THICKNESS OF COLD-FORMED STEEL MEMBERS SHALL BE PER THE

DESIGNATION (THICKNESS IN MILS)	MINIMUM BASE METAL (THICKNESS IN INCHES)	REFERENCE GAGE NUMBER	Fy (KSI)
18	0.0179	25	33
27	0.0269	22	33
30	0.0296	20 — DRYWALL	33
33	0.0329	20 — STRUCTURAL	33
43	0.0428	18	33
54	0.0538	16	50
68	0.0677	14	50
97	0.0966	12	50
118	0.1180	10	50

UNLESS NOTED OTHERWISE ON STRUCTURAL WALL STUD SHA WITHOUT EXPRESSED WRITTEN APPROVAL OF THE ENGINEER OF RECORD PROVIDE BLOCKING AT SUPPORTS OF ALL JOISTS. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER LOAD BEARING PARTITIONS UNLESS NOTED OTHERWISE.

ENDS OF STRUCTURAL WALL STUDS SHALL HAVE SQUARE END CUTS AND SHALL BE SEATED TIGHT AND SQUARELY AGAINST THE TRACKS. (MAXIMUM GAP TOLERANCE = 1/8"). UNLESS NOTED OTHERWISE, INSTALL DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS AND ISOLATED BEARING POINTS

WALLS, UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE EQUALLY SPACED BRIDGING AT 4'-0" O.C. MAXIMUM. BRIDGING SHALL ALSO BE PROVIDED AT ROOF LINE(S) UNLESS SOLID BLOCKING IS SPECIFIED ON THE DRAWINGS. FOR WALLS WITH NO AXIAL LOAD PROVIDE BRIDGING AT MID-HEIGHT OR AT 5'-0" O.C. MAXIMUM.

TRACKS AND LEDGERS BOLTED TO MASONRY OR CONCRETE SHALL BE INSTALLED WITH MINIMUM 1/8" X 3" X 3" PLATE WASHERS.

FASTENERS:

FASTENERS SHALL BE MANUFACTURED FROM MATERIAL NOT SUSCEPTIBLE TO CORROSION OR HAVE

SELF-DRILLING (TAPPING) SCREW FASTENERS FOR STEEL-TO-STEEL AND SHEATHING-TO-STEEL CONNECTIONS SHALL BE IN COMPLIANCE WITH SAE J78 OR OTHER RECOGNIZED DESIGN STANDARD. USE OF LARGER THAN SPECIFIED SCREW SIZE SHALL BE PERMITTED, PROVIDING THAT THE MINIMUM SPACING AND EDGE DISTANCE REQUIREMENTS (THREE TIMES THE NOMINAL SCREW DIAMETER) ARE MET. SCREW FASTENERS SHALL EXTEND THROUGH THE STEEL CONNECTION A MINIMUM OF THREE EXPOSED THREADS AND PENETRATE COMPONENTS WITHOUT CAUSING PERMANENT SEPARATION BETWEEN COMPONENTS. FOR STEEL-TO-STEEL CONNECTIONS SCREW HEAD SHALL BE IN CONTACT WITH THINNER MATERIAL UNLESS SPECIFICALLY NOTED OTHERWISE.

WELDING:

WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS D1.3 WHERE AT LEAST ONE OF THE CONNECTED PARTS IS EQUAL TO OR LESS THAN 0.188". A WRITTEN WELDING PROCEDURE SPECIFICATION MUST BE USED. WELDED AREAS SHALL BE TREATED WITH AN APPROVED TREATMENT TO RETAIN THE CORROSION RESISTANCE OF THE WELDED AREA. WELDERS EXPERIENCED IN THE WELDING OF LIGHT GAGE STRUCTURAL STEEL FRAMING SHALL PERFORM ALL WELDING.

SHOP DRAWINGS:

USE OF DRAWINGS CREATED BY SIMPLY STRUCTURAL INC. ARE NOT ACCEPTABLE FOR USE AS SHOP DRAWINGS. ANY SUBMITTALS CONTAINING SUCH WILL BE REJECTED WITHOUT REVIEW.

- TO PROVIDE SHOP DRAWINGS FOR REVIEW. SIMPLY STRUCTURAL INC. WILL REVIEW COMPLETED CONTRACTORS SHOP DRAWINGS AND OTHER APPROPRIATE SUBMITTALS THAT ARE A PROPERLY STRUCTURAL INC. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS
- 2. SHOP DRAWINGS SUBMITTALS SHALL INCLUDE AT A MINIMUM:
 - A LAYOUT PLAN KEYED TO TRUSS/JOIST/BEAMS ETC.
- C SEAL AND SIGNATURE OF A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION AFFIXED DIRECTLY TO BOUND DOCUMENTS.
- A REVIEW EACH SUBMISSION FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, OPERATIONS OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. C ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON
- SIMPLY STRUCTURAL INC. IN WRITING. D VERIFY ALL DIMENSIONS WITH ARCHITECT.
- DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

DEFERRED SUBMITTALS ARE DEFINED AS THOSE PORTIONS OF THE DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF APPLICATION. DEFERRAL OF ANY SUBMITTAL SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO SIMPLY STRUCTURAL INC. WHO SHALL REVIEW AND NOTE THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. ALL DEFERRED

SUBMITTALS SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION.

PREFAB WOOD TRUSSES WOOD I JOISTS

STEEL STRUCTURAL MEMBERS" INCLUDING THE 2004 SUPPLEMENT AND ESR-3064P.

FOLLOWING TABLE AND SHALL COMPLY WITH THE MANUFACTURING TOLERANCES LISTED IN ASTM C955.

0.0179	25	33	3350/
0.0269	22	33	Halv-VECHOTT CA
0.0296	20 — DRYWALL	33	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
0.0329	20 — STRUCTURAL	33	7 Signed 7/17/1/2
0.0428	18	33	OND ILS
0.0538	16	50	Expires 3/3 1/20
0.0677	14	50	7 / es 3/3 /
0.0966	12	50	
0.1180	10	50	
THE STRUCTURAL DRAWINGS, BE ALIGNED VERTICALLY SO			These drawings are instrument and are the property of Howard Howard Period and an expressly reserve

OF THE LOAD BEARING MEMBER BENEATH. ALL JOISTS AND TRUSSES SHALL BE INSTALLED WITH FULL BEARING OVER THE WIDTH OF THE BEARING MEMBER BENEATH. DO NOT NOTCH FLANGES OF MEMBERS

OF FRAMING MEMBERS ABOVE. BRIDGING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR AXIAL LOAD BEARING

STEEL SHALL BE GALVANIZED WHERE NOTED AND AT ALL LOCATIONS EXPOSED TO WEATHER. COLDFORM

RUST INHIBITIVE COATING SUITABLE FOR THE INSTALLATION IN WHICH THEY ARE BEING USED. ALL BODY DIAMETERS SHOULD MEET ANSI / ASME B18 6.4.

- 1. SIMPLY STRUCTURAL INC. ASSUMES NO RESPONSIBILITY FOR THE FAILURE OF THE CONTRACTOR FUNCTIONING AND INTEGRAL ELEMENT OF THE OVERALL STRUCTURAL SYSTEM DESIGNED BY SIMPLY

- B CLEARLY DEFINED DESIGN LOADS.

3. BEFORE SUBMITTING SHOP DRAWINGS OR ANY RELATED MATERIAL, THE CONTRACTOR SHALL:

B APPROVE AND STAMP AND SIGN EACH SUBMISSION BEFORE SUBMITTING IT. CONTRACTOR'S REVIEW. SIMPLY STRUCTURAL INC. SHALL ASSUME THAT NO SHOP DRAWING

OR RELATED SUBMITTAL COMPRISES A VARIATION UNLESS THE CONTRACTOR ADVISES

- 4. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT
- 5. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL ITEMS ARE CONSTRUCTED ACCORDING TO THE CONTRACT DOCUMENTS.

DEFERRED SUBMITTALS:

THE FOLLOWING ITEMS SHALL BE SUBMITTED PER THIS SECTION:

CITY APPROVED

KAF/DGS

07-17-19

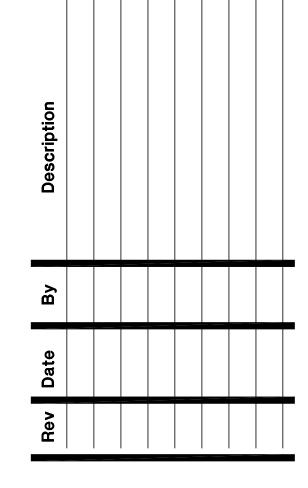
#19-029 **ENG:DGS** Fax 602-443-0404 730 N. 52nd Street, Suite 105 Phoenix, Arizona 85008 dschott@simplystructural.com

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Buckeye FS 705



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STATEMENT OF SPECIAL STRUCTURAL INSPECTIONS:

IN ADDITION TO THE INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE, SPECIAL STRUCTURAL INSPECTION IS REQUIRED FOR THE WORK LISTED BELOW AS STATED IN SECTION 1704 AND 1705 OF THE INTERNATIONAL BUILDING CODE. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK/TESTING ASSIGNED FOR CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.

1. CONCRETE CONSTRUCTION INCLUDING ICF WALLS: (REFERENCE IBC TABLE 1705.3) * CONTINUOUSLY DURING THE TAKING OF TEST SPECIMENS AND PLACING OF ALL CONCRETE. * VERIFY USE OF REQUIRED DESIGN STRENGTH.

* PRIOR TO AND CONTINUOUSLY DURING THE PLACEMENT OF CONCRETE AROUND BOLTS.

- 2. BOLTS IN CONCRETE:
- 3. REINFORCING STEEL: (REFERENCE IBC SECTION 1705.3 AND TABLE 1705.3) INSPECTION OF IN PLACE REINFORCING. THE SPECIAL INSPECTOR NEED NOT BE PRESENT CONTINUOUSLY DURING PLACEMENT OF REINFORCING STEEL PROVIDED THE SPECIAL INSPECTOR HAS INSPECTED FOR CONFORMANCE. PRIOR TO CLOSING FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE. * FOR ALL CONCRETE HAVING SPECIAL STRUCTURAL INSPECTION PER ITEM 1.
- * FOR SLABS ON GRADE. * FOR CONCRETE FOOTINGS.
- 4. WELDING: (REFERENCE AISC 360 SECTION N; IBC TABLE 1705.2.2)
- * INSPECT WELDS ACCORDING TO AWS D1.1/D1.1M.
- * INSPECT FLOOR AND ROOF DECK WELDS ACCORDING TO AWS D1.3. * INSPECT WELDING OF REINFORCING STEEL ACCORDING TO AWS D1.4 AND ACI 318: 3.5.2.
- * SPECIAL INSPECTION IS REQUIRED FOR ALL WELDS NOT PERFORMED IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH SECTION 1704.3.1 OF THE INTERNATIONAL BUILDING CODE.
- * VERIFICATION OF THE QUALIFICATIONS OF WELDING PROCEDURES AND WELDERS. * AN AWS CERTIFIED WELDING INSPECTOR FROM AN INDEPENDENT TESTING LABORATORY SHALL VISUALLY INSPECT ALL FIELD WELDS.
- 5. WELDING: (COMPLETE JOINT PENETRATION (CJP) (AISC 360 SECTION N; IBC TABLE 1705.2.2)
- * AN INDEPENDENT TESTING LABORATORY SHALL PERFORM ULTRASONIC TESTING OF 10% OF CJP CONNECTIONS IN MATERIAL 5/16" OR GREATER. IN CATEGORY III AND IV STRUCTURES, ALL CJP CONNECTIONS SHALL BE SUBJECTED TO ULTRASONIC TESTING.
- 6. STRUCTURAL MASONRY AND ICF WALLS: (REFERENCE ACI 530) * CONTINUOUSLY DURING PREPARATION AND TAKING OF ANY REQUIRED PRISMS OR TEST SPECIMENS.
- OF GROUT TO THE JOBSITE. * CONTINUOUS INSPECTION DURING ALL GROUTING OPERATIONS.
- * PRIOR TO CLOSING ALL CLEANOUTS. * VERIFY TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF

* PERIODIC INSPECTION OF ALL IN-PLACE REINFORCING AND GROUT SPACE PRIOR TO THE DELIVERY

- MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION. 7. EXPANSION AND EPOXY (ADHESIVE) ANCHORS: CONTINUOUS DURING THE PLACEMENT OF ALL ANCHORS.
- * ALL HOLES MUST BE DRILLED PRIOR TO SPECIAL INSPECTORS ARRIVAL ON SITE. * INSPECTOR TO VERIFY CORRECT DIAMETER AND DEPTH OF ALL HOLES AS WELL AS CORRECT
- ANCHOR TYPE, NUMBER, AND SPACING OF ALL ANCHORS AND THE EPOXY (ADHESIVE) TYPE. * INSPECTOR TO OBSERVE BRUSHING AND CLEANING OF ALL HOLES WITH COMPRESSED AIR PER MANUFACTURERS REQUIREMENTS.

GENERAL NOTES:

- 1. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING AND THE CONSTRUCTION SITE. THE CONTRACTOR SHALL USE ADEQUATE SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE OR IMPLY INSPECTION OF THESE ITEMS).
- 2. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.
- 3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION, RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. PLUMBING AND ELECTRICAL ITEMS WITH APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS
- 5. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.
- 6. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION, LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.
- 7. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

SPECIAL STRUCTURAL INSPECTION NOTES:

- 1. CONTACT SIMPLY STRUCTURAL INC. PRIOR TO THE START OF CONSTRUCTION FOR ADDITIONAL INFORMATION.
- 2. SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS AT A MINIMUM OF ONCE PER WEEK.
- 3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE
- WORKMANSHIP PROVISIONS OF THE BUILDING CODE. 4. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR, THEN, IF UNCORRECTED, THE PROPER DESIGN AUTHORITY AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS
- OR SPECIFICATIONS. 5. CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR SAFE ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED VIA IN-PLACE LADDERS, SCAFFOLDING,
- AND/OR CONTRACTOR OPERATED LIFTS AS REQUIRED FOR SAFE OBSERVATION.
- 6. SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE LICENSED STRUCTURAL ENGINEER. WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE
- SUPERVISING <u>STRUCTURAL ENGINEER</u> SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE. 7. CONTACT SIMPLY STRUCTURAL INC. FOR SPECIAL STRUCTURAL INSPECTIONS IN THE PHOENIX AREA
- AT (602) 443-0303 PRIOR TO STARTING CONSTRUCTION.

SPECIAL GEOTECHNICAL INSPECTION:

HORIZ. ---- HORIZONTAL

H.P. ---- HIGH POINTS

I.B.C. ---- INTERNATIONAL BUILDING CODE

I.C.C. ---- INTERNATIONAL CODE COUNSEL

1. EXCAVATION, GRADING AND FILL BY SOILS ENGINEER (REFERENCE TABLE 1705.6). SOILS ENGINEER SHALL PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF CONSTRUCTION. INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND SIMPLY STRUCTURAL INC.

STANDARD ABBREVIATIONS A.B. ---- ANCHOR BOLT .J. ----ISOLATION JOINT A.B.C. ---- AGGREGATE BASE COURSE INFO. ---- INFORMATION A/C ---- AIR CONDITIONER INT. ---- INTERIOR A.F.F. ---- ABOVE FINISHED FLOOR JT. ---- JOINT ALT. ---- ALTERNATE K(KIP) ----- 1000 POUNDS APPROX. ---- APPROXIMATELY ----- ANGLE @ ---- AT (MEASUREMENT) LBS (#) ---- POUNDS ARCH. ---- ARCHITECTURAL LG. ---- LONG BLDG. ---- BUILDING L.L. ---- LIVE LOAD BM. ---- BEAM LLH ---- LONG LEG HORIZONTAL B.F.F.---- BELOW FINISHED FLOOR LLV ----- LONG LEG VERTICAL B.O.B. ---- BOTTOM OF BEAM LONG. ---- LONGITUDINAL B.O.D. ---- BOTTOM OF DECK MFR. ---- MANUFACTURER B.O.F. ---- BOTTOM OF FOOTING MAS. ---- MASONRY BOTT. ---- BOTTOM MAS. C.J. ---- MASONRY CONTROL JOINT BRG. ---- BEARING MAT'L. ---- MATERIAL CANT. ---- CANTILEVER MAX. ---- MAXIMUM C.I.P. ---- CAST IN PLACE MIN. ---- MINIMUM C.J. ---- CONSTRUCTION JOINT MISC. ---- MISCELLANEOUS CL ---- CENTERLINE N/A ---- NOT APPLICABLE N.T.S. ---- NOT TO SCALE CLR. ---- CLEAR CMU ----- CONCRETE MASONRY UNIT O.C. ---- ON CENTER COL. ---- COLUMN OPNG. ---- OPENING CONC. ---- CONCRETE PREFAB ---- PREFABRICATED CONT. ---- CONTINUOUS PL ----- PLATE CONTR. ---- CONTRACTOR plf ----- POUNDS PER LINEAR FOOT CTR. ---- CENTER psf ----- POUNDS PER SQUARE FOOT DTL. ---- DETAIL psi ----- POUNDS PER SQUARE INCH DIA. ---- DIAMETER P.T. ---- POST TENSION OR PRESSURE TREATED REINF. ---- REINFORCING DIM. ---- DIMENSION D.L. ---- DEAD LOAD REQ'D. ---- REQUIRED Ø OR DIA. ---- DIAMETER REV. ---- REVISED / REVISION SCHED. ---- SCHEDULE DN. ---- DOWN DWG. ---- DRAWING SIM. ---- SIMILAR EA. ---- EACH S.I.P. ---- STRUCTURAL INSULATED PANEL E.E. ---- EACH END SLH ---- SHORT LEG HORIZONTAL F.F. ---- FACH FACE SLV ----- SHORT LEG VERTICAL E.J. ---- EXPANSION JOINT SQ. ---- SQUARE EL. ---- ELEVATION STD. ---- STANDARD EQ. ---- EQUAL SW ---- SHEARWALL E.W. ---- EACH WAY STL. ---- STEEL EXIST. ---- EXISTING STRUCT. ---- STRUCTURAL EXP. ---- EXPANSION T.C. ---- TOP CHORD FIN. ---- FINISH T.O.B. ---- TOP OF BEAM FLR. ---- FLOOR T.O.D. ---- TOP OF DECK FDN. ---- FOUNDATION T.O.F. ---- TOP OF FOOTING F.F. ---- FINISHED FLOOR T.O.L. ---- TOP OF LEDGER FT ---- FOOT T.O.M. ---- TOP OF MASONRY FTG. ---- FOOTING T.O.P. ---- TOP OF PLATE GA. ---- GAGF T.O.S. ---- TOP OF STEEL GALV. ---- GALVANIZED T.O.W. ---- TOP OF WALL G.C. ---- GENERAL CONTRACTOR TRANS. ---- TRANSVERSE G.L.B. ---- GLUE-LAMINATED BEAM TYP. ----- TYPICAL G.S.N. ---- GENERAL STRUCTURAL NOTES U.N.O. ---- UNLESS NOTED OTHERWISE H.A.S. ---- HEADED ANCHOR STUD VERT. ---- VERTICAL HC ---- HOLLOW CORE V.S. ---- VALLEY SET HG ----- HIP GIRDER WD. ---- WOOD

I.R.C. ---- INTERNATIONAL RESIDENTIAL CODE | W.W.F. ---- WELDED WIRE FABRIC

W/ ---- WITH

W/O ---- WITHOUT

WP ---- WORK POINT

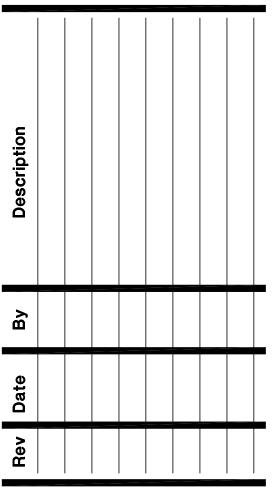
W/C ---- WATER/CEMENT RATIO

Buckeye FS 705 Phoenix, AZ 85016 480.951.5900 480.951.3045f perlmanaz.com



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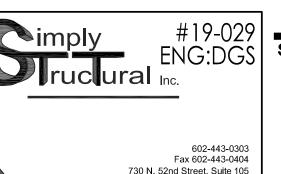
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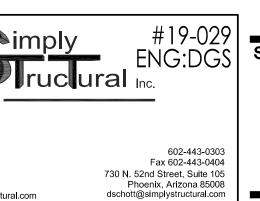
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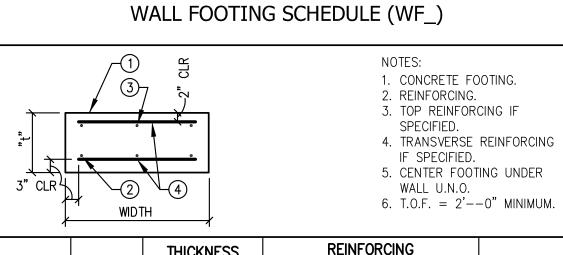
Sheet Number **GSN CONT**

318009

FOUNDATION SCHEDULES

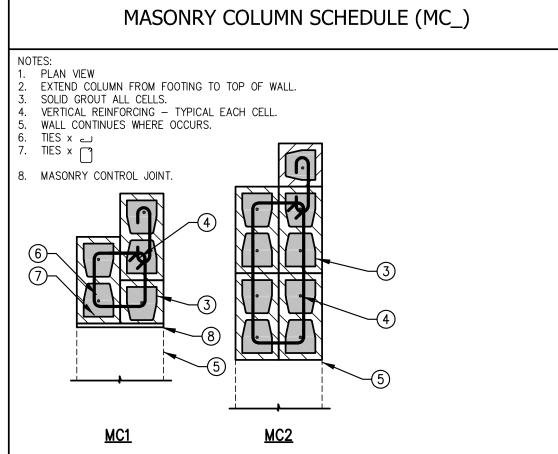
FOOTING SCHEDULE (F_) CONCRETE FOOTING. 2. REINFORCING. 3. TOP REINFORCING IF SPECIFIED. 4. TRANSVERSE REINFORCING IF SPECIFIED. 5. CENTER FOOTING UNDER WALL/COLUMN U.N.O. WIDTH

MARK	SIZE	THICKNESS	REINFORCING	NOTES
F1	3'-6"x3'-6"	12"	4 #5 EACH WAY	
F2	4'-0"x4'-0"	12"	5 #5 EACH WAY	



MADIZ	MIDTH	THICKNESS	REINFO	ORCING	NOTEC
MARK	WIDTH	"t"	CONTINUOUS	TRANSVERSE	NOTES
WF1	1'-4"	10"	2 #5		
WF2	1'-8"	10"	2 #5		
WF3	2'-0"	10"	2 #5		
WF4	2'-6"	10"	3 #5		
WF5	3'-0"	12"	4 #5	#5 AT 16" O.C.	
WF6	5'-0"	16"	7 #5 TOP AND BOTTOM	#5 AT 12" O.C. TOP AND BOTTOM	

COLUMN SCHEDULE (C_) MARK NOTES BASE CONNECTION SIZE 1/2x10x0'-10" STEEL BASE PLATE WITH HSS 3 1/2x (4) 3/4" DIA ANCHOR BOLTS 3 1/2x1/4 HSS 3 1/2x 1/2x10x0'-10" STEEL BASE PLATE WITH 3 1/2x1/4 (4) 3/4" DIA ANCHOR BOLTS



MARK	SIZE	VERTS	TIES	NOTES
MC1	SEE PLAN	5 #6	#3 AT 8" O.C.	SEE DETAIL
MC2	SEE PLAN	9 #6	#3 AT 8" O.C.	SEE DETAIL

FRAMING SCHEDULES

SIZE

5 1/8x15 GLB (C=0")

5 1/8x15 GLB (C=STD)

HSS 5x3x3/8 (SSV)

W 8x10

C 8x13.75

6 3/4x15 GLB (C=0")

6 3/4x15 GLB (C=STD)

LEDGER SCHEDULE (L_)

CONNECTION

3/4" DIA ANCHOR

BOLTS AT 32" O.C.

3/4" DIA ANCHOR

BOLTS AT 24" O.C.

3/4" DIA ANCHOR

BOLTS AT 32" O.C.

3/4" DIA ANCHOR BOLTS AT 16" O.C.

MARK

B3

B5

MARK

L1

L2

BEAM SCHEDULE (B_)

NOTES

NOTES

MASONRY LINTEL SCHEDULE (ML_)						
NOTE: 1. SEE DETAIL 26 FOR ADDITIONAL INFORMATION — TYPICAL U.N.O.						
MARK	TYPE	DEPTH/SIZE	REINFORCING/PLATE	NOTES		
ML1	CMU X	H = 16"	2 #5 BOTTOM	(1)		
ML2	CMU P	H = 24"	2 #5 BOTTOM	(1)		
ML3	CMU Y	2 L3 1/2x 3 1/2x1/4		(1)		
ML4	CMU Z	W 8x15	1/4x7 STEEL PLATE	(1)		
ML5	CMU Z	W 16x26	1/4x7 STEEL PLATE	(1)		
ML6	CMU $H = 56$ " $2 \#5 \text{ TOP AND BOTTOM}$ $EACH WYTHE (8 BARS TOTAL) (1)$		(1)			
ML7	CMU Y	2 L6x3 1/2 x5/16		(1)		

	BUILT-UP STEEL TRUSS SCHEDULE (ST_)
NOTE:	
1. CAMBER TRUSS 3/-2. ELEVATION:	(251) A
	BAA
	18'-0" 18'-0"
3. ALL MEMBERS AND	"L" ST1 CONNECTIONS SHALL HAVE AESS FINISH.

MARK	SIZE	NOTES
Α	HSS 6x6x1/4	
В	W 24x68	

JOIST SCHEDULE (J_)

NOTES: 1. SIMPSON ITT JOIST HANGER.

MARK	SIZE	TL/LL (PLF)	MAX SPACING	NOTES
J1	11 7/8" "I" JOIST	80/40	24" O.C.	(1)

HEADER SCHEDULE (H_)					
MARK	SIZE	JACK STUDS	KING STUDS	NOTES	
H1	6x6	1 - 2x6	2 – 2x6		
H2	6x8	1 - 2x6	2 – 2x6		
Н3	6x12	2 - 2x6	2 – 2x6		
H4	5 1/8x12 GLB	2 - 2x6	2 – 2x6		

PREFABRICATED WOOD TRUSS SCHEDULE (T_)

- 1. TYPICAL SLOPED ROOF DESIGN LOAD: DEAD LOAD = 30 PSF, (20 PSF TOP CHORD, 10 PSF BOTTOM CHORD) LIVE LOAD = 20 PSF (REDUCIBLE)
- TYPICAL FLAT ROOF DESIGN LOAD: DEAD LOAD = 20 PSF, (10 PSF TOP CHORD, 10 PSF BOTTOM CHORD) LIVE LOAD = 20 PSF (REDUCIBLE).
- 3. DESIGN TRUSSES FOR 10 PSF (ASD) NET WIND UPLIFT LOAD AT FLAT ROOFS AND 3 PSF (ASD) NET WIND UPLIFT AT SLOPED ROOFS. 4. DESIGN ALL ROOF TRUSSES FOR 150 LB DEAD LOAD, ADD LOAD AT ANY TOP CHORD. PANEL

NOTES

- POINT CONCURRENT WITH OTHER LOADS. 5. PROVIDE WIDER TRUSS BAYS AS REQUIRED FOR MECHANICAL UNIT PLACEMENT IN ROOF FRAMING
- SYSTEM. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. 6. TRUSS SPACING = 24" O.C. MAX. FINAL SPACING BY TRUSS MANUFACTURER.
- 7. PROVIDE BRIDGING AT 12'-0" O.C. MAX AND MEMBER BRACING FOR ALL ELEMENTS 8'-0" AND
- 8. SEE ARCH'L DRAWINGS FOR ADDITIONAL TRUSS DEPTHS AND INFORMATION. 9. TOP OF TRUSS WHERE OCCURS.

MARK

PROFILE



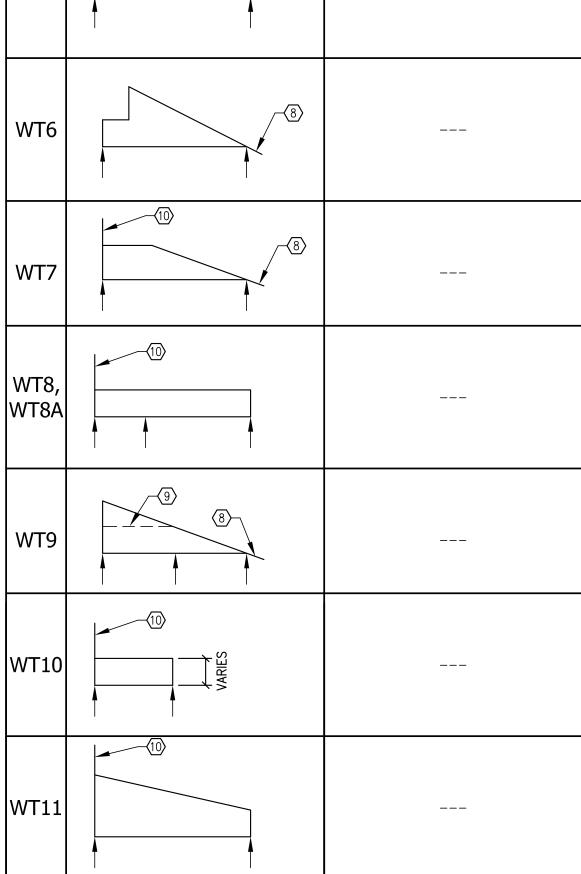
SEE DETAIL 42 FOR ADDITIONAL INFORMATION - TYPICAL LLN O

CMU

1. SEE DETAIL 42 FOR ADDITIONAL INFORMATION — TYPICAL U.N.O.					
MARK	TYPE	DEPTH/SIZE	REINFORCING/PLATE	NOTES	
IL1	ICF	H = 16" (MIN)	2 #4 BOTTOM		
IL2	ICF	H = 24" (MIN)	3 #4 BOTTOM		
IL3	ICF	H = 32" (MIN)	4 #4 BOTTOM		

WT1	8	
WT2	8	
WT3		

WT4	
WT5	



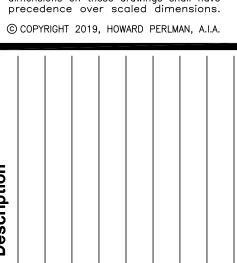


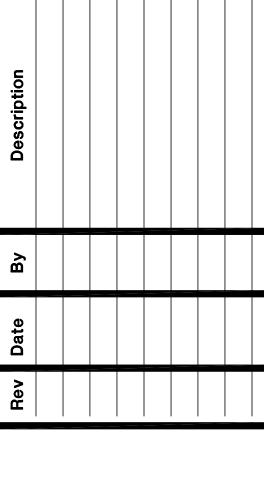
318009 Buckeye FS 705

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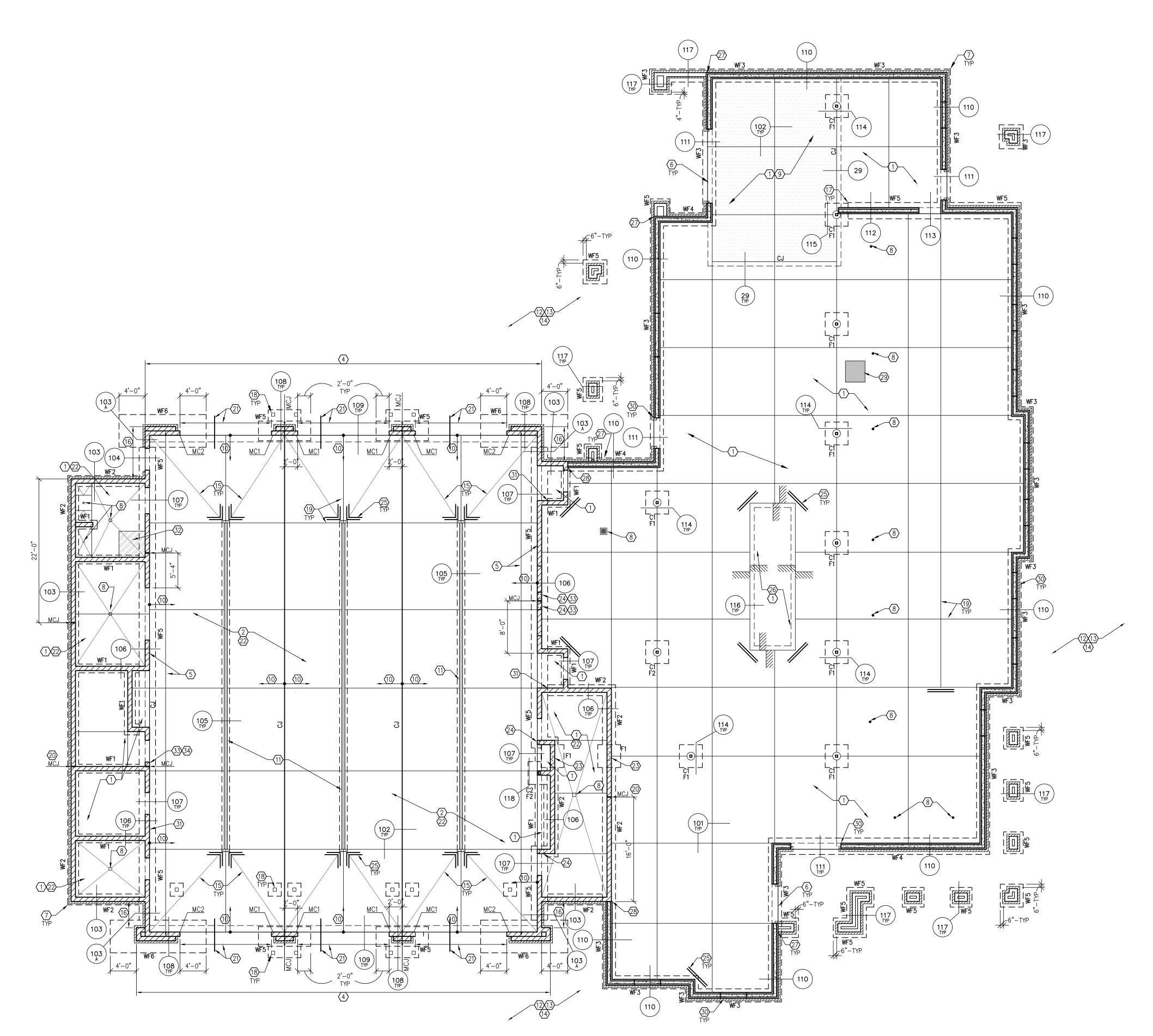
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07-17-19 **Project Number**

318009 Sheet Number SCHEDULES



FOUNDATION PLAN

 $\sqrt{\text{SCALE: } 1/8" = 1'-0"}$

FOUNDATION PLAN NOTES

- 1. 5" CONCRETE SLAB (F'C = 4,000 PSI) OVER 4" A.B.C. TYPICAL U.N.O.
- 7" CONCRETE SLAB (F'C = 4,000 PSI) OVER 6" A.B.C. REINFORCE SLAB WITH 5 LBS/CY OF FIBER REINFORCING TYPICAL AT APPARATUS BAYS.
- 3. STEP FOOTINGS AS REQUIRED PER DETAIL 9 TO MAINTAIN BOTTOM/TOP OF FOOTING ELEVATION SHOWN — TYPICAL.
- 4. 16" MASONRY WALL WITH #5 VERTICALS EACH WYTHE AT 8" O.C. TYPICAL AT APPARATUS BAY FRONT WALLS U.N.O..
- 5. SOLID GROUT WALL INDICATED TO LOW ROOF ELEVATION IN AREA INDICATED. PROVIDE BOND BEAM BLOCK OR FULLY MORTAR ALL HEAD JOINTS. WALL DOES <u>NOT</u> REQUIRE SOLID GROUTING ABOVE LOW ROOF ELEVATION.
- 6. PROVIDE 1/2" PREFORMED JOINT FILLER AT ALL LOCATIONS WHERE EXTERIOR SLABS ABÚT TO BUILDING U.N.O. ON ARCH'L DRAWINGS..
- 7. ALL HORIZONTAL REINFORCING IN FOOTINGS, STEMWALLS AND WALLS SHALL BE CONTINUOUS AROUND ALL CORNERS AND INTERSECTIONS PER TYPICAL
- 8. FLOOR DRAIN SEE ARCH'L AND MECH'L/PLUMBING DRAWINGS FOR EXACT LOCATION, SLOPE, ETC.
- 9. VAPOR BARRIER PER G.S.N. IN AREAS INDICATED. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. WHERE VAPOR BARRIER OCCURS, REINFORCE SLAB WITH 5 LBS/CY OF FIBER REINFORCING.
- SLOPE.
- 11. TRENCH DRAIN TYP. SLOPE FLOOR TO DRAIN.
- 12. SEE DETAIL 1 AND GSN FOR EARTHWORK REQUIREMENTS.
- 13. SEE ARCH'L AND CIVIL DRAWINGS FOR LOCATIONS AND LIMITS OF SITE WORK, SIDEWALKS, CURBS, SITE WALLS, ETC.
- 14. SEE ARCH'L DRAWINGS FOR LOCATION OF EXTERIOR SLAB JOINTS TYPICAL. PROVIDE JOINTS AT 12'-0" MAXIMUM EACH WAY IN UNREINFORCED SLABS PER DETAIL 101 AND AT 18'-0" O.C. MAXIMUM EACH WAY IN REINFORCED SLABS PER DETAIL 109 U.N.O.
- 15. WARP LINE TYPICAL.
- 16. #5 VERTICALS AT 16" O.C. TYP FULL HEIGHT WALLS AT SIDES OF ÄPPARATUS BAY.
- 17. EXTEND CONTINUOUS FOOTING REINFORCING INTO PAD FOOTING AT INTERSECTIONS - TYPICAL.
- 18. BOLLARD PER DETAIL 10 TYPICAL. SEE ARCH'L DRAWINGS FOR EXACT LOCATION AND QUANTITY. EXTEND FOOTING PER DETAIL 10 AS REQUIRED.
- 19. SAWCUT JOINT TYPICAL U.N.O. CJ INDICATES SLAB CONSTRUCTION JOINT. SEE DETAILS 101 AND 102.
- 20. MCJ INDICATES MASONRY CONTROL JOINT PER DETAIL 21. VERIFY ALL MCJ LOCATIONS WITH ARCH'L DRAWINGS PRIOR TO CONSTRUCTION.
- 21. PROVIDE DOWELS PER DETAIL 113 WHERE INDICATED ON PLAN WHERE EXTERIOR CONCRETE SLABS OCCUR.
- 22. SLOPE SLAB TO DRAIN SEE ARCH'L AND MECH'L/PLUMBING DRAWINGS. 23. 1 #5 VERTICAL FULL HEIGHT OF WALL IN EACH OF 3 ADJACENT CELLS,
- CENTERED ON BEAM/LINTEL/GIRDER BEARING. 24. 2 #5 VERTICAL FULL HEIGHT OF WALL IN EACH OF 2 ADJACENT CELLS AT
- JAMB (4 BARS TOTAL). 25. 2 #4x4'-0" CENTERED IN SLAB AT 6" O.C. - TYPICAL AT RE-ENTRANT

CORNERS AND DISCONTINUOUS SLAB JOINTS. BEND BARS AS REQUIRED.

- 26. RAISED CONCRETE SLAB IN AREA INDICATED PER DETAIL 116. SEE ARCH'L DRAWINGS FOR ADDITIONAL INFORMATION.
- 27. CONNECT WOOD STUDS TO ICF WALLS PER DETAIL 67 TYP U.N.O.
- 28. CONNECT MASONRY WALLS TO ICF WALLS PER DETAIL 44 TYP U.N.O.
- 29. DEPRESSED FLOOR SLAB 2" MIN TYPICAL AT HANDICAPPED BATHROOM SHOWER PER DETAIL 119. SEE ARCH'L DRAWINGS FOR DEPTH, SIZE AND LOCATION OF DEPRESSION FOR ADDITIONAL INFORMATION.
- 30. SEE DETAIL 68 FOR WOOD INFILL FRAMING AROUND DOORS AND WINDOWS IN ICF WALL OPENINGS TYP. SEE ARCH'L DRAWINGS FOR ADDITIONAL
- 31. SEE ELECTRICAL AND ARCH'L DRAWINGS FOR SWITCH BOXES AND CONDUIT IN MASONRY WALLS. SEE DETAIL 23 FOR LIMITATIONS OF CONDUIT/PIPE/BOXES
- INDICATES AREA WITH 8" CONCRETE SLAB (F'C = 4,000 PSI) OVER 4" A.B.C. — TYPICAL AT EXTRACTOR. EXTEND 18" ALL AROUND EXTRACTOR.
- 33. PROVIDE TIES WHERE INDICATED AND WHERE REQUIRED PER DETAIL 21 -
- 34. 2 #5 VERTICAL FULL HEIGHT OF WALL IN ONE CELL AT JAMB OR WALL END (2 BAR TOTAL)

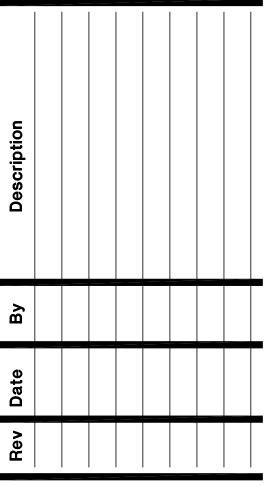


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07-17-19

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318009 **Sheet Number**

FOUNDATION PLAN

#19-029 ENG:DGS Fax 602-443-0404 730 N. 52nd Street, Suite 105 Phoenix, Arizona 85008 dschott@simplystructural.com

NOTE: BOTTOM OF FOOTING ELEVATION

OR FINISHED FLOOR ELEVATION, WHICHEVER IS LOWER - TYPICAL

SHALL BE 2'-0" MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE



- 1/2" PLYWOOD SHEATHING TYPICAL AT WOOD JOIST ROOFS U.N.O. SEE G.S.N. FOR LAYUP AND ATTACHMENTS.
- 2. SLOPE.
- ROOF DRAIN OPENING TYPICAL. SEE DETAILS 65 AND 66 FOR FRAMING AT OPENINGS. FOR EXACT SIZE, LAYOUT AND LOCATION OF OPENINGS, SEE ARCH'L AND PLUMBING DRAWINGS.
- 4. RIDGE LINE.
- 5. VALLEY LINE.
- 6. HIP LINE.
- 7. OVERFRAMING IN AREA INDICATED PER DETAIL 69.
- 8. OPEN TO BELOW.
- 9. 2x FASCIA BEAM SHALL BE CONTINUOUS IN AREA INDICATED TYPICAL 8'-0" MIN FROM CORNERS.
- 10. SIMPSON MSTC40 STRAP FROM BEAM TO 3x TOP PLATE.
- 11. 2x BLOCKING AND STRAPS AT 4'-0" O.C. MAX PER DETAILS 207 AND 217. EXTEND 6'-0" MIN U.N.O.
- 12. 2x BLOCKING AT ALL HIP, VALLEY AND RIDGE LINES. PROVIDE STAGGERED PLYWOOD EDGE NAILING EACH SIDE TO BLOCKING TYPICAL.
- 13. MECHANICAL UNIT TYPICAL U.N.O. SEE DETAILS 47 AND 66 FOR ROOF MOUNTED UNIT SUPPORT. WEIGHTS AND LOCATION OF MECHANICAL UNITS ARE APPROXIMATE. FOR EXACT WEIGHTS, LOCATIONS, DUCT OPENINGS, ADDITIONAL UNITS, ETC., SEE ARCH'L AND MECH'L DRAWINGS. PROVIDE ADDITIONAL TRUSSES AS REQUIRED. LOADS INDICATED ON PLAN INCLUDES A 20% INCREASE AS REQUIRED BY IBC.
- MECHANICAL OPENING TYPICAL. SEE ARCH'L AND MECH'L DRAWINGS FOR EXACT LOCATION, NUMBER AND SIZE OF OPENINGS. FOR FRAMING AT OPENINGS, SEE DETAIL 47, 65 AND 66.
- 15. ROOF HATCH OPENING. FOR LOCATION AND SIZE OF OPENING, SEE ARCH'L DRAWINGS. FOR FRAMING AT OPENINGS, SEE DETAIL 65 AND 66.
- 16. MECHANICAL OPENING IN MASONRY OR ICF WALL. SEE ARCH'L AND MECH'L DRAWINGS FOR EXACT LOCATION, SIZE AND ELEVATION OF OPENING. SEE DETAIL 28 FOR OPENING LIMITATIONS.
- 17. HOLD BEAM 1" CLEAR OF ICF/MASONRY WALL FACE.
- 18. SIMPSON DSC5 AT TRUSS GIRDER TO TOP PLATE. DESIGN GIRDER FOR 3000# (ASD) AXIAL WIND/SEISMIC LOAD.
- 19. STEEL TUBE BRACE FROM ABOVE PER DETAIL 229.
- MCJ INDICATES MASONRY CONTROL JOINT PER DETAILS 21. LOCATE JOINT AT JAMB OR STEEL BEAM SPLICE.
- PROVIDE CONTINUOUS 6x6 WOOD PLATE PER DETAILS 247 AND 248 IN AREAS INDICATED. CONNECT PLATES AT CORNERS TO PERPENDICULAR WALLS PER DETAIL 257.
- 22. EXTEND STEEL BEAM LINTEL OVER FULL SUPPORT WIDTH, PROVIDE 3/8" END PLATE WELDED ALL AROUND BEAM AND DOUBLE ANGLE LINTEL.
- 23. SIMPSON VB BRACING AT 4'-0" O.C. MAX TYP AT CANTILEVERED WOOD

 BEAMS.
- 24. CONNECT TRUSS GIRDER TO BEAM/WALL WITH SIMPSON LGT GIRDER TIEDOWN.
 25. CONNECT HIP GIRDER TO GIRDER WITH SKEWED SIMPSON THA HANGER.

26. CONNECT TRUSS GIRDER TO GIRDER WITH SIMPSON THA HANGER.

SEE ARCH'L ROOF PLAN AND ROOF DETAILS FOR FIRE BLOCKING LAYOUT AND LOCATIONS WITHIN ROOF TRUSS SYSTEM. PROVIDE 2x BLOCKING PANELS PER

DETAIL 63 AT EACH FIRE BLOCKING LOCATION WITH GYPBOARD/PLYWOOD AS REQUIRED ON ARCH'L DRAWINGS.

imply #19-029 ENG:DGS

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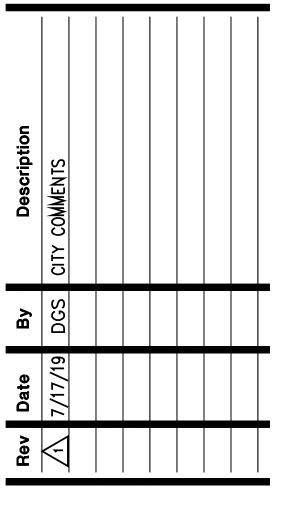
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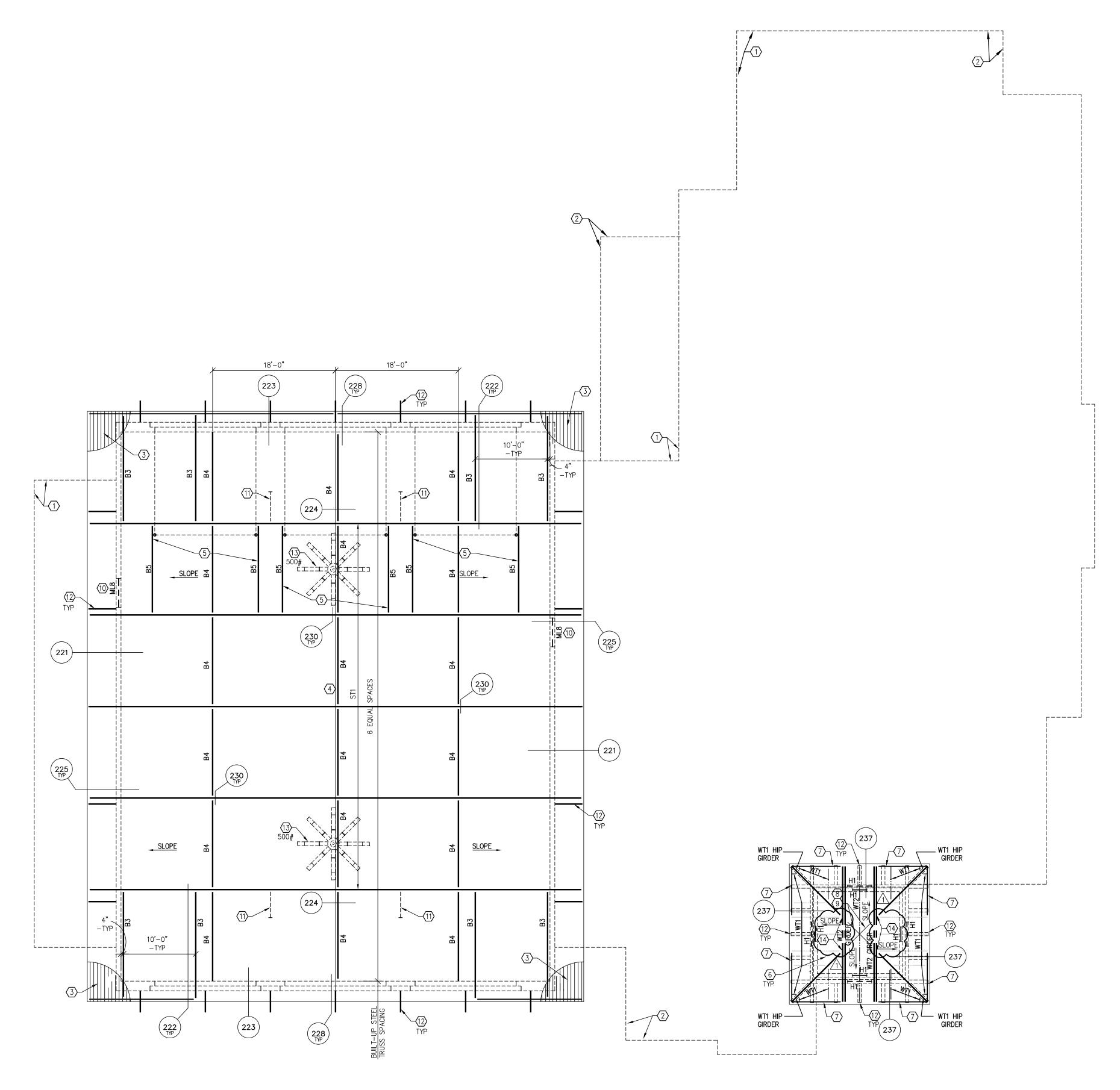
07-17-19

Project Number 318009

Sheet Number
ROOF FRAMING PLAN

S1.2

ROOF FRAMING PLAN



HIGH ROOF FRAMING PLAN

HIGH ROOF FRAMING NOTES - TYPICAL U.N.O.:

OUTLINE OF WALL BELOW.

RIDGE LINE.

HIP LINE.

2. OUTLINE OF ROOF EDGE BELOW.

46 AND GSN FOR LAYUP AND ATTACHMENT.

GSN FOR LAYUP AND ATTACHMENT.

DETAIL 28 FOR OPENING LIMITATIONS.

DETAIL 71 FOR ADDITIONAL INFORMATION.

11. STEEL TUBE BRACE FROM BELOW PER DETAIL 229.

3. 3"x18 GAGE STEEL DECK - TYPICAL AT APPARATUS BAY ROOF. SEE DETAIL

OVERHEAD DOOR SUPPORT POST PER DETAIL 226. SEE ARCH'L DRAWINGS FOR ADDITIONAL INFORMATION.

6. 1/2" PLYWOOD SHEATHING - TYPICAL AT WOOD JOIST ROOFS U.N.O. SEE

2x FASCIA BEAM SHALL BE CONTINUOUS IN AREA INDICATED – TYPICAL 10'-0" MIN FROM CORNERS.

8. 2x BLOCKING AT ALL HIP, VALLEY AND RIDGE LINES. PROVIDE STAGGERED PLYWOOD EDGE NAILING EACH SIDE OF TO BLOCKING.

10. MECHANICAL OPENING IN MASONRY OR ICF WALL. SEE ARCH'L AND MECH'L DRAWINGS FOR EXACT LOCATION, SIZE AND ELEVATION OF OPENING. SEE

12. FAUX WOOD OUTLOOKER/RAFTER TAIL PER ARCH'L DRAWINGS - TYP. SEE

13. CEILING FAN — TYPICAL. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT WEIGHTS, AND LOCATIONS OF MECHANICAL UNITS, ETC. WEIGHTS AND LOCATIONS OF MECHANICAL UNITS ARE APPROXIMATE. ALL

MECHANICAL UNIT LOADS SHOWN INCLUDE A 20% INCREASE AS REQUIRED BY THE IBC. FOR FRAMING AT FANS, SEE DETAIL 49.

14. CONNECT HIP GIRDER TO GIRDER WITH SKEWED SIMPSON THA HANGER

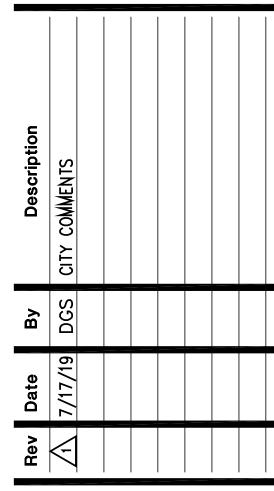
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Buckeye FS 705



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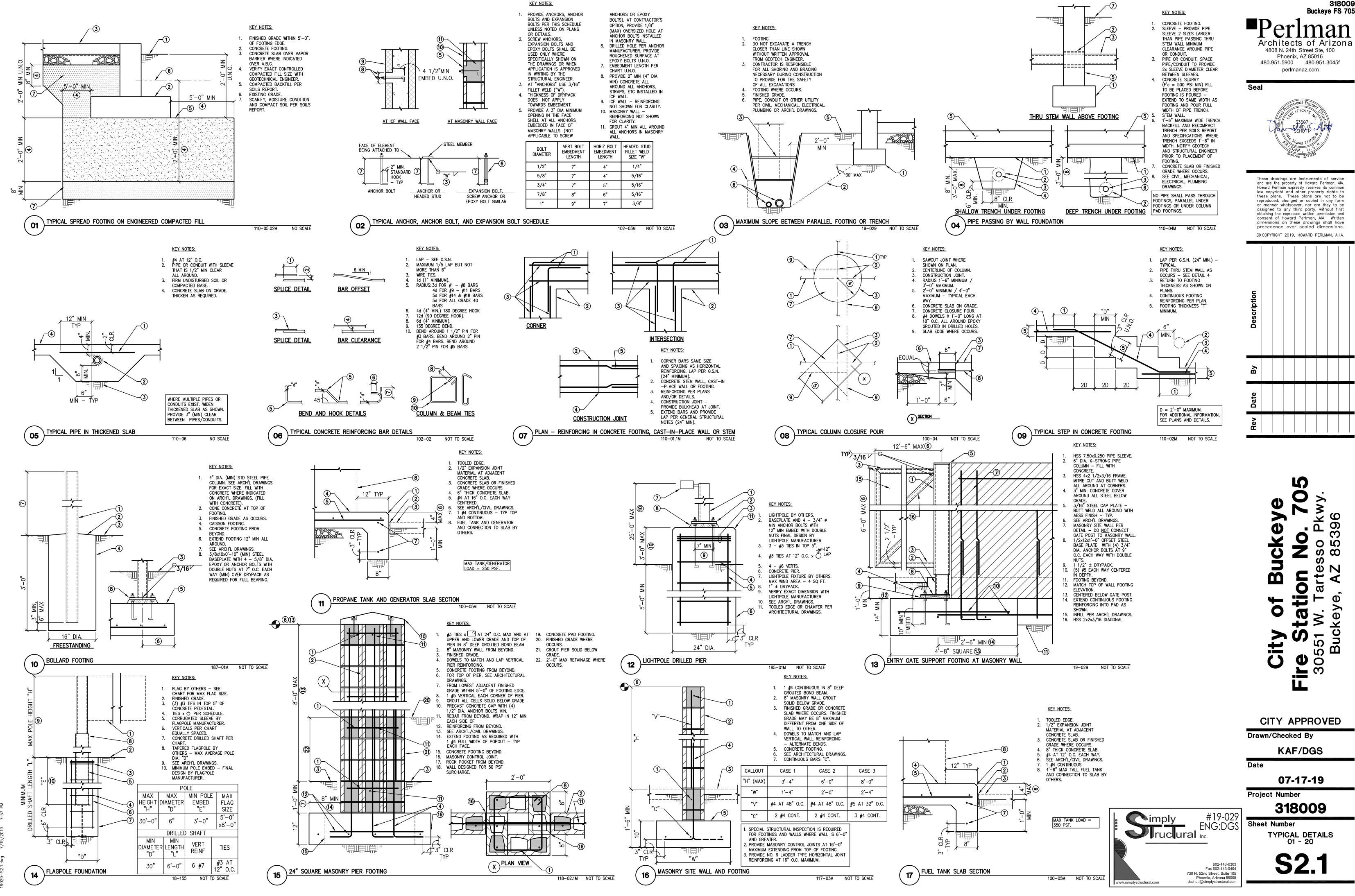
SEE ARCH'L ROOF PLAN AND ROOF DETAILS FOR
FIRE BLOCKING LAYOUT AND LOCATIONS WITHIN ROOF
TRUSS SYSTEM. PROVIDE 2x BLOCKING PANELS PER
DETAIL 63 AT EACH FIRE BLOCKING LOCATION WITH
GYPBOARD/PLYWOOD AS REQUIRED ON ARCH'L
DRAWINGS.

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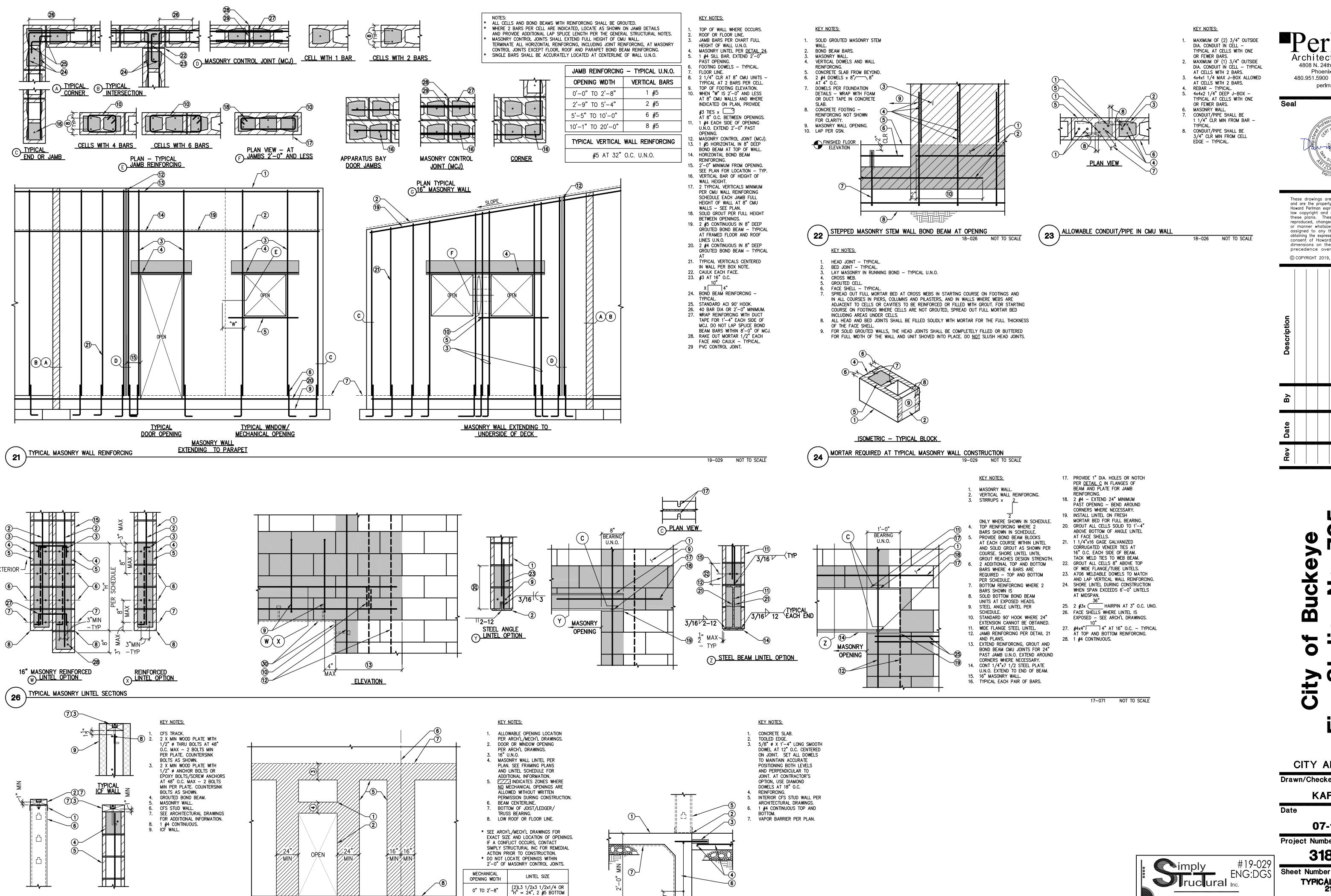
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Sheet Number HIGH ROOF FRAMING PLAN



Buckeye FS 705



(29) CONCRETE CONSTRUCTION JOINT AT INTERIOR CFS STUD WALL

19-029 NOT TO SCALE

2'-9" TO 5'-4" (2)L5x3 1/2x1/4 (LLV) OR "H" = 24", 2 #5 BOTTOM

5'-5" AND WIDER | 2 #4 TOP AND BOTTOM

19-029 NOT TO SCALE

AT OPENING

ALLOWABLE OPENINGS IN MASONRY WALL

AT BEAM BEARING

TYPICAL LIGHT GAGE STUD WALL

(27) TYPICAL TOP OF PARAPET SECTION

TYPICAL MASONRY WALL

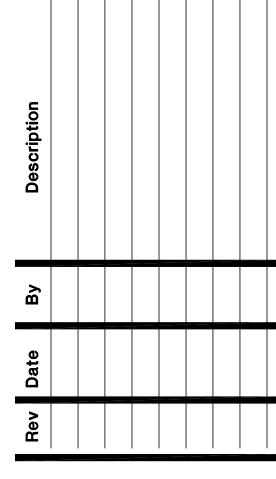
19-029 NOT TO SCALE

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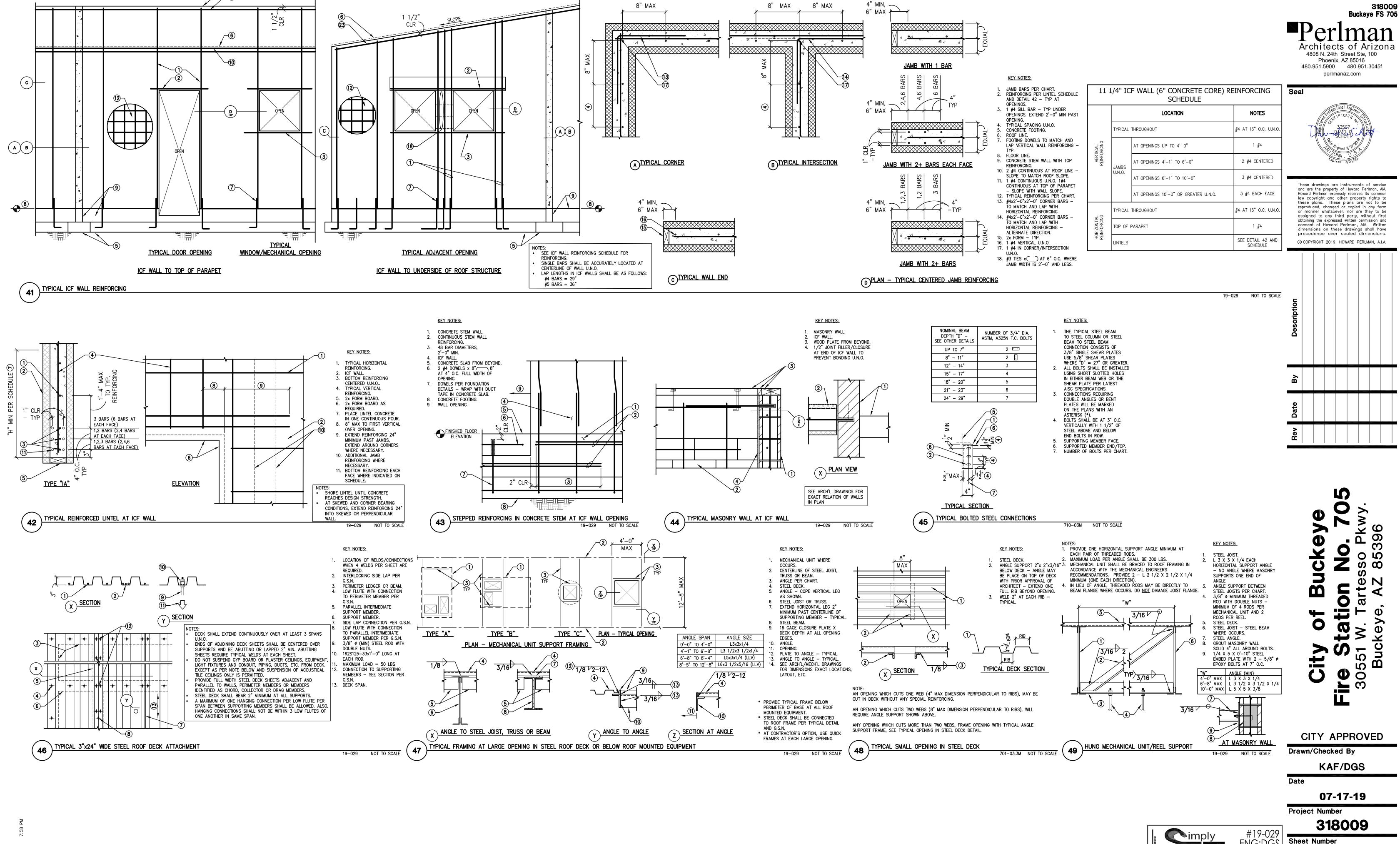
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318009

TYPICAL DETAILS 21-40



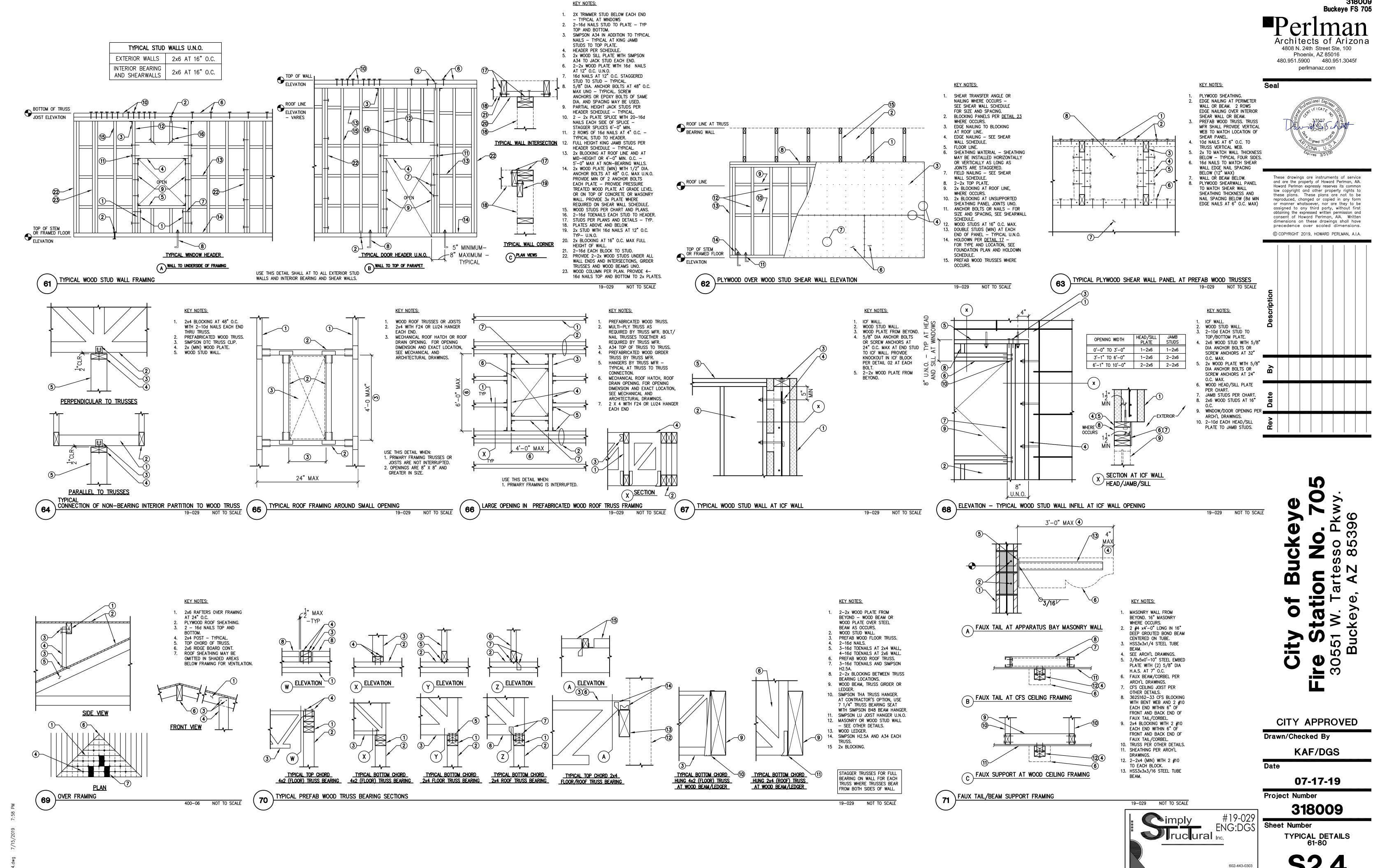
8" MAX

8" MAX

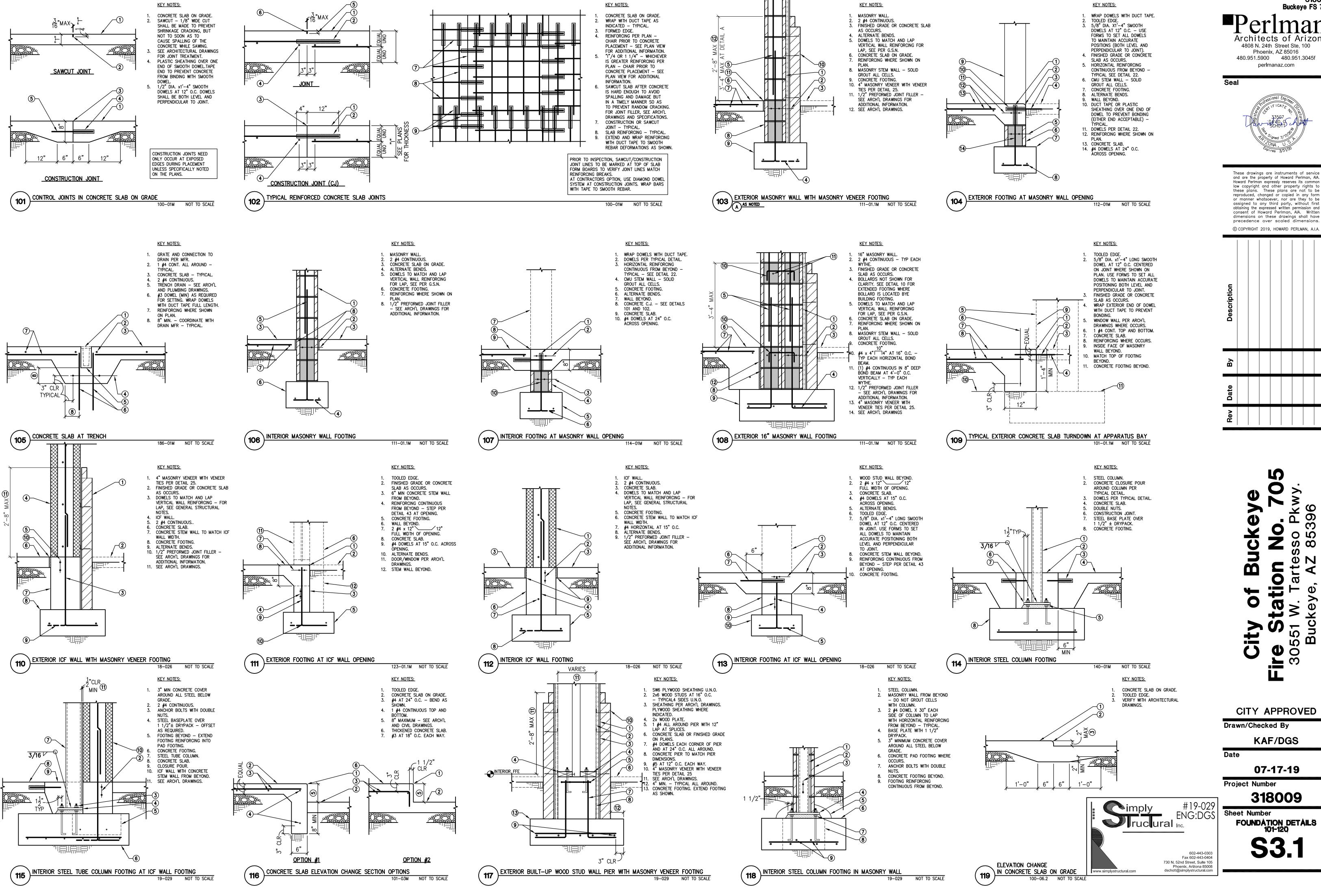
8" MAX

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TYPICAL DETAILS



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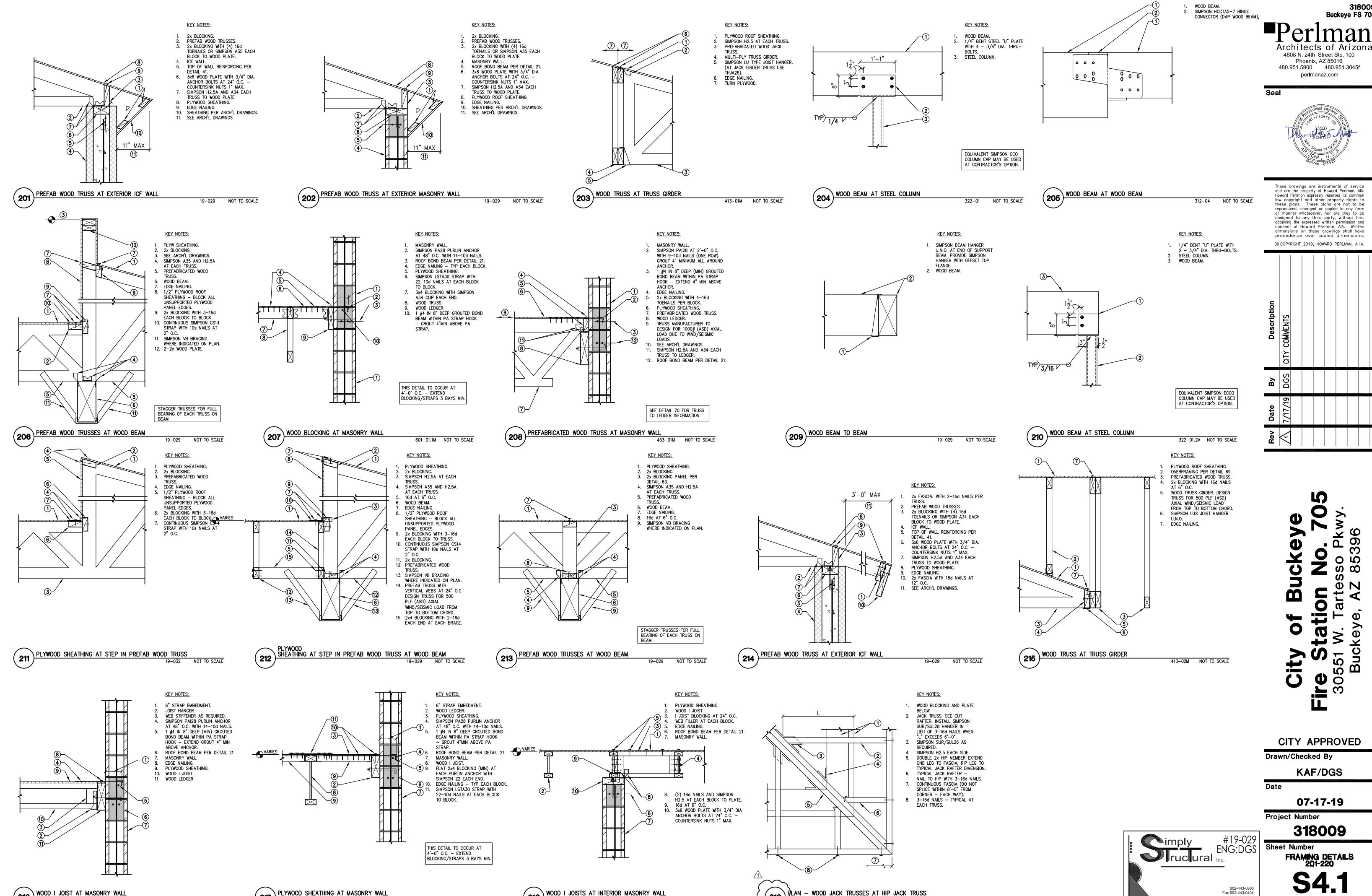
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FOUNDATION DETAILS



WOOD I JOISTS AT INTERIOR MASONRY WALL

18-026 NOT TO SCALE

LAN - WOOD JACK TRUSSES AT HIP JACK TRUSS

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KAF/DGS

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KEY NOTES:

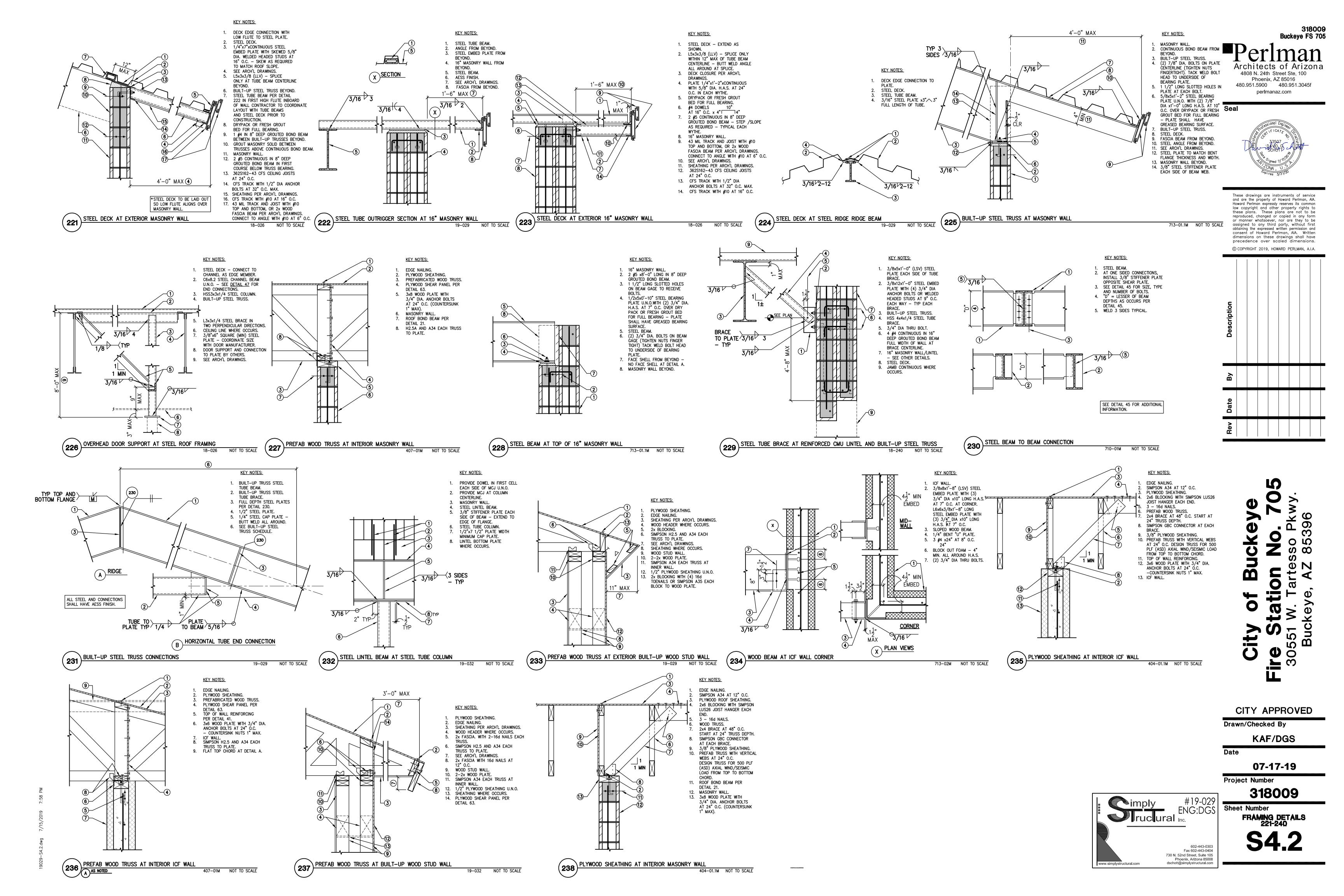
Buckeye FS 705

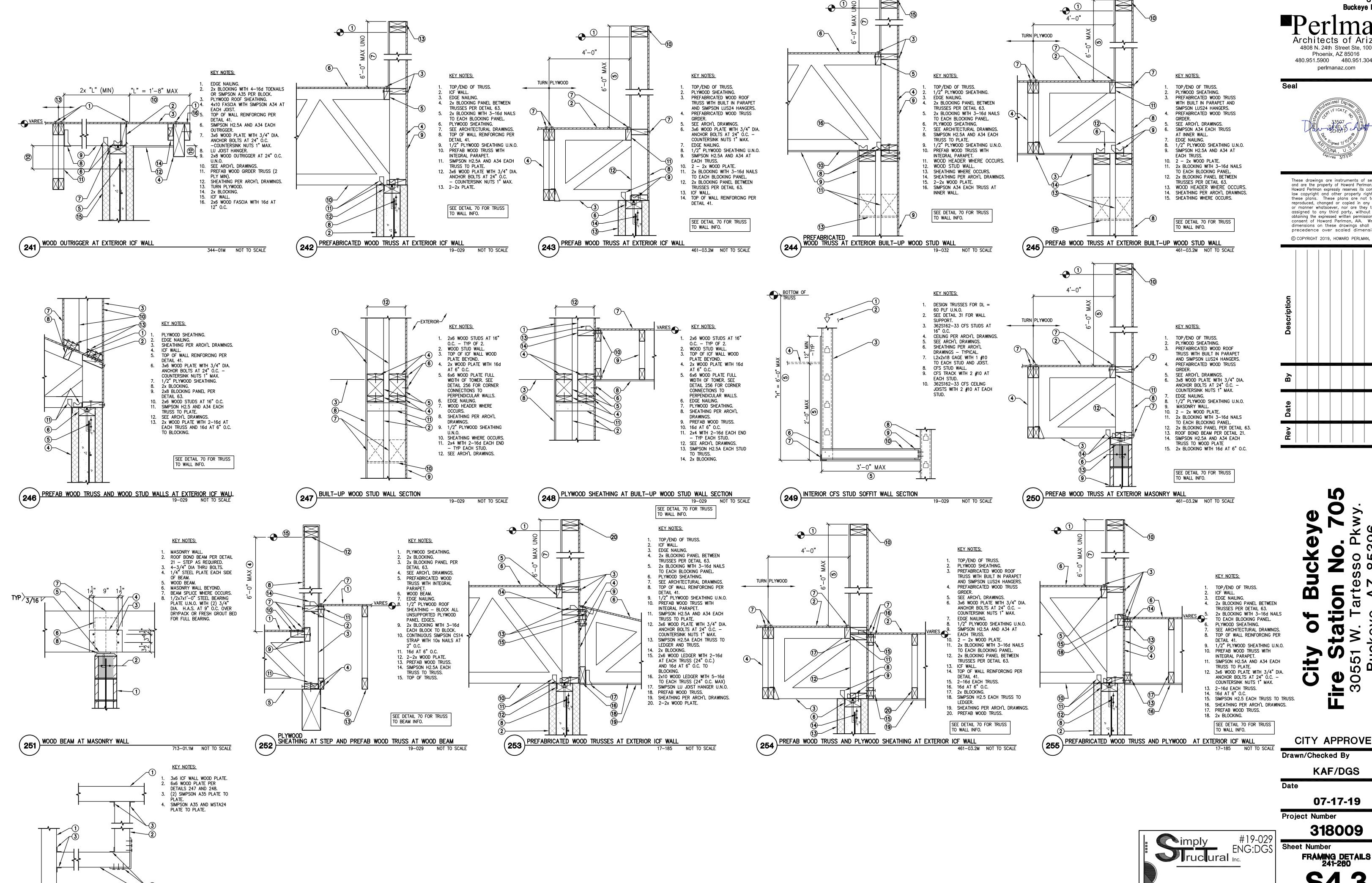
07-17-19

Project Number

318009

Sheet Number FRAMING DETAILS





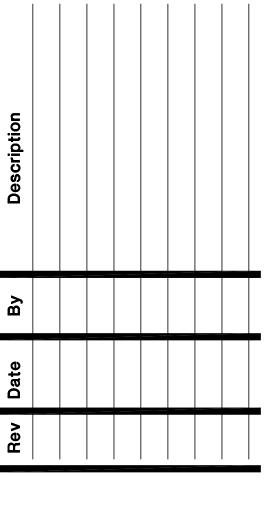
(256) PLAN VIEW - WOOD PLATE TO PLATE AT ENTRY TOWER

Buckeye FS 705 4808 N. 24th Street Ste, 100 Phoenix, AZ 85016 480.951.5900 480.951.3045f



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